An Introductory Lecture

ON

MENTAL TRAINING IN MEDICAL STUDY.

Delivered at St. George's Hospital Medical School at the Opening of the Winter Session, Oct. 1st, 1894,

BY ISAMBARD OWEN, M.D., F.R.C.P.,

DEAN OF THE SCHOOL.

GENTLEMEN,—The honour of greeting you at the opening of a new academic year has fallen this time to me, and custom demands that I should begin with some brief reference to the changes that have taken place among us during the year that is past. The respect and esteem of more than thirty generations of St. George's men have followed Dr. Howship Dickinson in his retirement from the active service of the hospital he has served so well and the school to which he has added such conspicuous lustre. With them have mingled our congratulations at the entrance of Dr. Lee Dickinson on the path his father and his grandfather have trodden before him. With no less gratification do we see Dr. Cyril Ogle following likewise in his father's steps and exercising in turn the office ascribed of old to Rhadamanthus. In Mr. Gardner, who has succeeded Dr. Rideal in the lectureship on chemistry, we welcome another link with the older universities with which our school has been so long and so honourably connected. Both Oxford and Cambridge have contributed of their best to fill three new offices created during the year, for Dr. Rem'ry has entered the staff as assistant obstetric physician, while Dr. Dickson has been appointed junior anæsthetist and Dr. Wilson assistant curator. If I keep one item to the last it is because I claim a peculiar interest in the work of the medical registrarship, which has now been committed to the hands of Dr. Fyffe, another of the many sons whom Cambridge is proud to own. More internal changes I must needs speak of in barer terms, but you will hear with pleasure of Dr. Cavafy's succession to the joint lectureship on medicine in conjunction with Dr. Whipham, and of Mr. Sheild's accession to the lectureship on practical surgery, which Mr Dent has exchanged for that on operative surgery, and with no less pleasure of Dr. Dickinson's acceptance of the office of Baillie lecturer in physic; and, to travel a little out of the usual course, I feel sure I may offer your felicitations to so old and tried a friend as Dr. Duka on the successful completion of his important work as President of the Tropical Section in the recent Congress at Budapest.

To some of you who are here, to-day will mark an epoch in your educational career. You will for the first time find yourselves working not merely to win academic renown but to fit yourselves for the discharge of serious and responsible duties. It may even be that for the first time you will find yourselves turning from the study of abstractions to the consideration of material things. To you in particular tradition assigns me the flattering but puzzling task of addressing a few words of counsel on the subject of your future duties and the qualifications needed for performing them. A puzzling task, because the subject is so vast and all its parts so closely connected that it is difficult to select any one for separate treatment. But time being short and occasion urgent, I will pass without comment over the moral qualities—earnestness, steadfastness, courtesy, and probity—which medical life demands, and over the physical discipline required to fit yourselves for the marvellous handiwork of modern operative surgery, and will endeavour to speak of some matters within my more immediate cognisance connected with the mental training that goes to the making of a physician.

I speak advisedly of the physician's training, because, above all, I wish you to bear in mind that training as well as learning is a necessary part of medical education. You are not preparing yourselves only to pass examinations or in prospect of a life of lettered ease. You have to do as well as to know; and medical doing, like all other doing, requires a special cultivation of the faculties by which it must needs be exercised. Mere learning, however profound, can no more enable you to practise medicine than to command an army in the field. I will ask you in passing to accept the word "physician" in a wider sense than that to which ordinary English custom restricts it. The line that once separated physicians and surgeons has now no existence in law and is limited to the special sphere of consulting practice. The two professions have been united in one, and every candidate is required to possess the qualifications of both. But Parliament, in consolidating the profession of medicine, unaccountably omitted to accord its members any common title by which they may be generally known. The law knows us under the cumbrous style of "registered medical practitioners," in the Services we are "surgeons," to the newspapers "medical men" or sometimes "medical gentlemen," and the general public, taking refuge in a piece of time-honoured slang, persistently calls us "doctors." In the United States common consent has extended a more general term to cover a more special; and the sensible American habit of calling medical practitioners generically "physicians" is one I think we should do well to borrow.

The practice of physic, in the eyes of the public, consists in the application of remedies to the cure or relief of disease. Though this is indeed our ultimate aim, the actual application of the remedies bears some such relation to the entirety of the physician's work as the visible part of a modern battleship does to the mass of metal floating under water. You will not proceed far in your studies before you discover that nine-tenths of his task are most often done before he utters a word of advice or writes the first line of a prescription, and that the power of discriminating diseased conditions, to the casual eye a simple and easy matter, is in reality the aim of the greater part of the lengthy course of study you have to go through. Diseases are disturbances of organs of the body. The organs of the body are many, the modes and causes of disturbance at least equally numerous. There are parasites from without and new growths from within, inflammations and structural changes, and countless derangements of function of less tangible origin, but not always of less serious import. Few of these disordered conditions can be the subject of direct observation. The organs they affect are for the most part concealed from actual view, and direct exploration is a measure that can be used only in the gravest emergencies. We have for the most part to form our judgment from a combination of observations of a difficult and delicate character—observations of subjective phenomena made through the medium of the patient's mind and our own skill in questioning, observations of minute changes in the condition of the visible surface, observations of involutions of the surface by means of optical apparatus, observations of the results of physical, chemical, and physiological tests, microscopic observations of disrupted fragments, and observations of a series of fine acoustic and tactile phenomena and reactions elicited and appreciated by means of the trained fingers or various artificial appliances. To but few observed phenomena, subjective or objective, does a single value attach. It is only by a consideration of their varying combinations that we can arrive at an opinion as to their cause or tell with certainty if the patient's state be grave or trivial, one of temporary disturbance, specific infection, or incurable organic change. But until such a judgment is formed to apply a remedy is to cast a stone at a venture. Rational treatment can only be based upon the exact "diagnosis," as our esoteric term has it, of disease. His observations made, the physician has therefore to frame such a theory of the case—or theories, if more than one be possible—as in the light of his accumulated knowledge shall accord with and explain the entire body of the facts. He must verify his theory, or discriminate between them if there be more than one, by such further present or subsequent observations as may be feasible, and his final conclusion he ultimately brings to a practical test by laying down a plan of treatment and abiding the result. Such, in broad outline, is the physician's method. It is not peculiar to medicine—it is essentially the ordinary method of physical investigation. Between the science and the art of medicine there is no hard-and-fast line, for the art mainly consists in the application of scientific method to a particular set of problems, and the science is but a wider application of the art.

I am anxious that you should attach some definite meaning to the words "science" and "scientific," which will encounter you like haunting spirits at every stage of your career: spirits of good, if rationally understood; if not, Will-o'-the-wisps to lure you astray. Around these words has gathered in our day a certain halo of intellectual grandeur, so much that the mere use of them in an argument creates in many minds a presumption in favour of the side on which such reverend symbols are invoked without too curious inquiry as to the legitimacy of the invocation. There is a

loose popular notion which has misled many students and from which even some professed authorities on medical education seem not able wholly to extricate themselves—viz., that "scientific" means something done with a test tube or a microscope or a scalpel, and that pursuits which cannot be brought within the compass of a laboratory are not legitimately entitled to the name. I recall a time (it was, perhaps, an extreme case) when some of our best students were induced systematically to neglect their clinical opportunities in order to spend long hours over a mechanical occupation which is now ordinarily performed by a boy and a machine, because, forsooth, some pedant had persuaded them that cutting microscopic sections was "scientific" work and recording medical cases was not. Dismiss such a trivial use of these words altogether from your minds. In their rational sense "science" and "scientific" are terms definitive of a method, not of a subject or a place of study. Be it in the laboratory or the hospital ward, or among the most ordinary surroundings of your future daily work, wherever soundly drawn conclusions are based upon observations accurately made there and there only is science. If there be a distinction between clinical and laboratory work, it is that the problems presented by the former are the more complex and the training required to meet them a longer and severer one. When, therefore, you are exhorted to make your study of medicine a scientific one do not, as some unhappily do, take it as an intimation that devotion to some branch of physical science or experimental research may atone for neglect of clinical training, but rather as an injunction to pursue your studies of whatever kind with increased attention to precision and to method; to aim at rendering your observations always more trustworthy, your reasoning more logical and more complete. Do not understand me as wishing to decry in the least degree the importance of laboratory science. Nothing is further from my intention; to neglect laboratory studies is to condemn yourselves to walk in fetters to the end of your days. I am only warning you not to let a trivial use of a word persuade you that intellectual dignity and value attaches to the one field of your studies any more than to the other.

Accurate observation is the foundation of all medical work, and the power of accurate observation is one which everybody thinks he possesses, but which in reality is seldom found except as the result of some special training. What ordinarily passes for observation is a combination of observation and assumption, with the latter at times the predominant element. Take, for example, the common-place instance of reading. The matter consists of words, and words of letters; but we read down a page of ordinary printed matter at a rate at which it would be physically impossible to form a distinct visual impression of even half the letters of which it is composed. If you analyse the process I think you will find that you form such an impression of but few. For the most part we do not identify letters at all. We note the length and general shape of the words, and their most prominent points and lines, and fill in the rest from the stored up impressions of previous experience with a facility that long habit has given. For ordinary matter the method serves well enough. We read and transcribe it with at least practical precision. But where the matter to be read or transcribed is full of strange words, unaccustomed forms, and unusual or archaic spelling, the weakness of the process shows itself in a significant manner. A passing experience of archæological work revealed to me how surprisingly rare is the power, even with the best of intentions, to give an accurate transcript or correctly revise a proof of a passage from an ancient manuscript or a page from an early printed book, and how few people seem even conscious of their liability to error. The old habit of assumption is too strong; familiar forms and familiar letters will intrude themselves in unauthorised places. One of the greatest scholars of the time once told me that in editing a text for philological purposes he was accustomed to read every proof six times over, fixing his attention by naming each separate syllable aloud and touching it as he went with his pen, that after this rigid exercise he laid the text by for a year and then read it in a similar manner again; and that thus only was he able to ensure complete fidelity of reproduction.

If such scrupulous care is needed in reference to matters so well defined and so simple as ordinary printer's type, I need not excuse myself for urging the necessity of similar care in dealing with that more varied and more difficult alphabet from which we have to draw the elements of a medical diagnosis. Our task is indeed a trebly hard one, for the letters we have to read are often blurred and not easy to distinguish, while the bent to assumption is doubly strong inasmuch as our minds are nearly always filled with preoccupations of theory as well as preoccupations of habit. To accurate medical observation there is no royal road. The habit cannot be acquired from books, or by the most diligent listening to the lectures of the most highly endowed professors. There is no way but the old-fashioned one still followed in the London schools: the constant close personal observation of case after case under skilled supervision, and the systematic reduction to written or graphic records of what is observed. "Writing," says Bacon, "makes the exact man." I will presume to place on a level with writing the older art of record from which it sprang. I have never understood the neglect with which the teaching of drawing has been regarded in school education. It may be due to the fortuitous connexion of the art with pursuits that the mass of mankind have always treated with a degree of contempt, however fashion may for the time have prescribed the worship of their leading professors. But drawing has no necessary connexion with the fine arts, and for educational purposes should not be treated as though it had. It is not the making of a picture, but the accurate representation of visible phenomena, that the educational drawing master should aim at. As an art of practical utility drawing hardly yields even to the "three R's"; as a training in exact observation it has no superior. I trust the day will come when the man who cannot draw will be as rare as the man who is unable to write. The hand of the reformer is on school education, and revolutions far deeper than this are thought to be impending. I will not assume to pronounce upon the most debated educational question of the day, or to prejudge the merits of systems as yet untried, but I cannot help feeling that whatever advantage an earlier introduction to natural knowledge may claim, the old-fashioned classical training, with its enforced accuracy of observation and its minute punctiliousness of detail, is by no means the worst introduction that could be devised to a life of scientific work.

As a special part of the art of observation I must not pass over without notice what, for want of a better term, I may call the cultivation of the arithmetic sense. Arithmetic perception, the power of discriminating numbers, appears to be a faculty of late development in the history of the human mind. The most philosophic language of the ancient or modern world long retained a relic of the time when mankind had no definite perception of any numbers but one, two, and three. Such, at least, is one explanation given of the persistence of a dual number by the side of a plural in classic Greek. There are still, we are told, savage races who have developed in their languages no numerals above the third, for the reason that all numbers beyond three are to their minds indistinguishable "multitude." Civilised man has progressed beyond this. We have learned to count from one to infinity, and to divide unity into infinitely small fractions, and, thanks to certain handy symbols given us by the Arabians, to perform with ease complex arithmetical calculations which an Alexandrian mathematician would have thought impossible even for the gods. It needs an effort to realise that all this is mere machinery, and that in point of arithmetic sense we are but little in advance of our savage forefathers. If this seems strange to you, you may easily test it by a simple experiment. Display in irregular order a series of cards marked with dots ranging in number from one to fifty, and see how many you or your friends can distinguish without the artificial aid of counting. But one in twenty, I venture to say, apart from chance, will succeed in distinguishing more than ten or twelve. Or try a similar experiment with lengths or areas or measures of capacity, and see if you get more satisfactory results. Or take the evidence of language (it is a practical point), and mark how vagueness of arithmetic conception reflects and even exaggerates itself in vagueness of arithmetic diction. Our grammars contain an ample list of numerals; the State supplies a set of standard measures; but in speech and writing, even the most careful, numerals and terms of measurement have to give place to a host of words, such as "many," "few," "large," "small," "often," "seldom," to which it is difficult to attach any definite meaning. We are fain, however, to use them, not precisely because our conceptions are equally vague, but because they are still not definite enough to find arithmetical expression. Such words as these have, of course, properly speaking, no positive meaning at all; they are really comparatives, implying comparison with some standard existing in the speaker's mind. If the standard in the hearer's mind happens to be the same, the

speaker's meaning is so far correctly conveyed; but as often as the standard differs misunderstanding of necessity results. You may think I am pursuing a trivial theme; I am really but touching the fringe of a profoundly important matter. If science be not measurement, as has been said, measurement is at least an important element of science; and in work such as ours, in which we deal with so many things in their nature incapable of artificial mensuration, a highly developed natural sense of number, quantity, and degree is doubly desirable. I think I am not exaggerating in attributing at least a tenth of error in clinical theory and clinical practice to defective measurement or to misconceptions arising from inexact expressions of quantity and the like. If our school reformers would turn their attention to this elementary matter, if our school children could be trained in numerical perception till forty, let us say, could be as easily distinguished from fifty as four from five, and line, surface, and area estimated with similar exactness, and if they were systematically disciplined to eschew vague terms wherever precise arithmetical conceptions could be formed and expressed, more, I think, would be done to render the rising generation scientific than the suppression of Latin in favour of biology can possibly effect.

To analyse the processes of reasoning by which your observations will be rendered fruitful is a task I will not even pretend to enter upon. I will give you but one caution, a practical one, though at first blush you may think it the reverse. If you would reason correctly in medicine you must cultivate the habit of thinking in concrete terms, or, I should more precisely say, in impressions of sense rather than in words. Medical questions are never questions of words, always of things; never, properly speaking, of abstractions, but always of material objects comporting themselves in accordance with physical law. As such, every medical fact you acquire should be clearly conceived in your mind. The purpose of medical diagnosis is not to find a name for a disease, but to form a mental picture of a patient's condition, to the end that your plan of treatment may be regulated accordingly. No two cases are ever precisely alike; under the same names are included conditions differing in respect of treatment as far as pole from pole, and the name of your patient's disease is no more a picture of your patient's case than the word "city" is a picture of London or York. I have twice already bid you beware of certain classes of words. Let me now repeat the warning in more general terms. Words are implements we cannot do without, but implements that need always to be cautiously handled. They are good servants, but, like other servants, by long familiarity they tend to become the masters of those they serve. In medicine, as in other modes of thought, it is easy to fall into the indolent habit of reasoning about words instead of the things or ideas they are supposed to represent. Words are not ideas, and have only a general and often imperfect correspondence with ideas. They are symbols of human device to which social convention, and nothing else, accords a significance that is not always precisely defined—a sort of paper currency to which a credit for ideas is given, deceptive in so far as the credit is often fluctuating and uncertain, doubly deceptive if they are uttered, as at times they are, without adequate effects in the utterer's mind to redeem them. Speech, according to Talleyrand, was given for the concealment of thoughts; indolence perverts it to the baser use of hiding the lack of them. If you think the warning I am giving a fanciful one, reflect only, outside the domain of medicine, on the reams of paper and hours of talk which have been wasted upon such questions as "What is true art?" or "What constitutes true poetry?" a kind of question to which in the nature of things there can be no satisfactory answer. Let it be but realised that "art" or "poetry" is a word, that words are symbols and their significance matter of convention, let the question be phrased in its rational form: "What ideas do men use this word to convey?" and the essence of the answer becomes as obvious as noon—that some use it to represent this group of ideas, others that group of ideas, that the one use has as much authority as the other, and that, in fine, no precise convention has ever been established on the subject. The same careless habit of taking the paper note without inquiry into its value reappears again and again in medical history. More than once has medical counsel been darkened by wrangles over the nature of an assumed entity of disease which was really but a word summing up a certain set of unexplained external manifestations. But it is less of medical theory than of medical practice that I am speaking to-day. The advance of medical theory is the work of the comparatively few; the soundness of medical practice is a matter in which all are concerned. I am warning you mainly lest in the work of practice you should find yourselves directing your treatment, like the uninstructed amateur, to the name of a disease instead of the patient's case, and selecting your remedies in virtue of some classificatory title that they bear, rather than from a rational conception of what you desire them to do. Caution is the more necessary because the technical language of medicine, the accumulation of countless schools of workers scattered over twenty-five centuries of time, is not, like the vocabularies of more recent and simpler sciences, framed upon definite principles and developed on a logical plan. It abounds in words of parallel form appropriated to different orders of conceptions, in terms which different authorities have used in different senses, and in terms which linger on from habit or convenience, though expressing obsolete conceptions or grouping ideas which more recent thought has dissociated and thrown into fresh combinations. Especially is this the case in the department of medical theory which was the last to be brought under scientific method—that, I mean, which concerns the operation of remedial agents.

Such as it is, our language has grown up with us; we cannot now alter it, and must make the best of it. You will find no real difficulty as long as you make up your mind to remain the masters instead of the servants of your vocabulary, and to admit no term into it to which you cannot attach some definite meaning, realisable as a visual image or at least in terms of some material sense. A chain of verbal reasoning, remember, though correct in form, may be erroneous in result, unless you are careful to see that each link of language corresponds to a link of fact. Wade boldly, if you will, into the sea of medical diction, but never let your feet be carried from the ground. There is no surer criterion between the trained physician and the man who has been merely taught than the manner in which the obscurer terms of medicine drop from his lips. In the one case they are as obviously instruments for the conveyance of clearly conceived ideas, as in the other they are exorcisms in which the speaker has learnt to trust.

The idea of training as a necessary element of medical study has to a marked degree moulded the system of education pursued in the London schools, where, thanks to the abundance of clinical material and of practised clinical teachers that the resources of the profession in the capital supply, it has at the same time been possible to carry it into practical effect. We wish our pupils' minds to take an active rather than a passive part in the work of their own development. We do not content ourselves with asking you to sit at your teachers' feet and be docile recipients of dogma and precept, we invite you from the first to use your own eyes, your own ears, and your own powers of criticism and judgment. Our aim is to see you not only learned scholars, but self-reliant and capable men, on whom dependence may be placed by others. There is in prospect the possibility of a great change in the position of our schools. In common fairness we have felt bound to demand that the distinction of a university degree in medicine, hitherto in London the premium of a certain special course, shall be accessible to our students on terms more nearly approaching those obtaining elsewhere. To meet this requirement and similar claims made on the part of other branches of study, a scheme for the reconstitution of the University of London on a wider basis has lately been presented to the Crown by a Royal Commission, for whose painstaking performance of a difficult task a tribute of sincere gratitude is due. The merits of the scheme itself are matter of controversy, into which it is not my present place to enter. I have never concealed my personal sense of the danger to soundness of medical education with which certain parts of the scheme are charged, but I gladly quit the ungrateful office of criticism for the pleasanter duty of bidding all here a cordial welcome to the scene of their past, their present, or their future labours.

CAXTON CONVALESCENT HOME.—The foundation-stone of this Home, which is situated at Limpsfield, Oxted, in Surrey, will be laid by the Right Hon. the Lord Mayor of London, supported by the President and others, to-day, Saturday, Oct. 6th. A special train will leave London Bridge Station at 3 P.M., returning at 6 P.M.

An Introductory Lecture

ON

THE PUBLIC, THE PROFESSION, AND MEDICAL CHARITIES.

Delivered at the Middlesex Hospital Medical School at the Opening of the Winter Session, Oct. 1st, 1894,

BY ROBERT BOXALL, M.D. CANTAB., M.R.C.P. LOND.

ASSISTANT OBSTETRIC PHYSICIAN TO THE MIDDLESEX HOSPITAL AND LECTURER ON PRACTICAL MIDWIFERY AT THE MIDDLESEX HOSPITAL MEDICAL SCHOOL.

"ON a certain day in the fall of the year the cockchafers were wont to assemble from all parts, and solemnly to impale upon a pin one of their number, choosing each year the next younger in succession. The chafer thus impaled buzzed round upon his pin, the greater his pain the quicker he moved his wings, and the shriller and the louder were his buzzings. At the end of an hour he was taken off his pin (for he did not always die), and all the assembly feasted together. They pledged the recent victim in nectar, and declared each year that the buzzings were superior to the last—that is, that their 'tone' was 'higher.' At length one of the insects, whose turn to be impaled was approaching, appealed for protection to those who had but recently been tortured, but they said, 'Is it likely that we, who have already undergone our torture, should endeavour to make your lot better than ours has been?' The chafer then turned to the elders and implored them to abolish the cruel and useless custom, or, if not, to give an example to the younger by themselves willingly undergoing the ceremony, which their venerable and exalted position in the tribe would enable them to endure with a dignity unattainable by comparatively mere grubs. To him they answered: 'We should have much pleasure, but our time for buzzing is past; moreover, each must have his turn; whatever has been must be, and do not you perceive that no sooner is each chafer taken from his pin than he becomes an upholder of this ancient custom?' Moral: Expect no relief of suffering in the future from those who have suffered in the past."

"The above fable of the 'Cockchafer and the Pin,' which I have culled from an introductory address delivered ten years ago, so exactly suits the present occasion that I may well be pardoned for quoting it. Ten years ago to-day that martyred cockchafer was to be found in the person of Dr. Champneys, impaled upon the pin at St. George's Hospital;[1] now it is myself at the Middlesex. But at the outset I will relieve your minds by promising that I do not intend to buzz for a full hour. Time was when the opening of the medical year proved a grand occasion in all our medical schools, and the introductory address was an important function; but times have changed even since the day when I entered as a student. Whether the change has been for the better or the worse I will not at the present moment venture to discuss; but the fact remains that the summer session now offers opportunities as great, or even greater, than the winter for the commencement of medical study. For this, among other reasons, I venture to think that the custom of delivering an introductory address at the opening of the winter session is likely ere long to fall into desuetude here as elsewhere. As, however, the task of buzzing has on the present occasion been imposed upon me, and the opportunity of viewing these annually recurring struggles has been once again granted you, I shall endeavour to improve the occasion for the short space of time during which I shall speak to you by first referring, in more or less general terms, to your work as students and to your future labour as practitioners of the healing art, and subsequently I shall have a few words to say upon certain aspects of the medical profession as it is now, compared with what it was a few years ago. But before addressing myself to that part of my task let me take this opportunity on my own account, and on behalf of my colleagues, of offering a hearty welcome to those who as new students come among us to-day for the first time, as well as to those with whose faces we are familiar, and who are now returning to their studies fortified and refreshed after what has, I trust, proved a pleasant vacation. Conceiving, as I do, that the primary object aimed at in the institution of introductory lectures was to be found in the opportunity afforded of tendering counsel and advice to those who enter upon the devious paths of medical education, I feel that I should not adequately fulfil the trust imposed upon me if on the present occasion I omitted to speak specially at the outset to those who now for the first time gaze upwards, through the dim vista of the medical curriculum, towards its diploma-crowned summit. To you, as one who looks sooner or later to guide your steps along the obstetric section of the road which one and all must traverse as you mount upwards, I offer to-day the hand of right good fellowship. For you I hope that those paths will not prove as tedious as they are devious. And to you I would say this: by whichever route you elect to reach the summit, you will ever find a trustworthy guide in my distinguished colleague, our worthy dean, Dr. Coupland. Fortify yourselves with his advice at the outset, lest perchance you start off on the wrong road, and, sooner or later, find it necessary to retrace your steps, adding, maybe, of your own accord, another year to the five which the General Medical Council have, with great consideration, prescribed for your journey."

[Dr. Boxall then dwelt with emphasis upon the necessity that exists that every student should educate himself, and not believe that he can become a fully-fledged practitioner without proceeding step by step. By the time the student has reached the summit, he said, which from the foot seems the one and only point to be attained—by the time he is the proud possessor of a medical degree or diploma, if not before, he may be certain there will dawn upon his vision other summits to which he will then be aspiring to attain.

"Let me ask you," he continued, "in all your dealings with patients and their friends not to forget that they are living human creatures, with all their feelings, anxieties, responsibilities, and hopes. Illness often makes people peculiarly susceptible, and sometimes unreasonable. Learn to be gentle with them and to bear with their shortcomings, to imagine yourself for the nonce in their position, to grasp the case as it presents itself to them, with their unenlightened eyes and from their point of view, and temper your actions accordingly. It is no small part of your education so to learn. The lesson learnt will in due time bring its own reward, in respect and in gratitude, at any rate, if not in more substantial form. Occasionally, no doubt, you will find that your best efforts exercised in the patient's behalf meet with but scant recompense; as the old rhyme has it—

> God and the doctor both alike adore,
> But only when there's danger, not before;
> The danger o'er, both are alike requited—
> God is forgotten and the doctor slighted.

But this is the exception, not the rule. If you practise your profession honourably and well you will be sure to meet with much appreciation, if not from the community at large, for which the profession does so much, at least from many an individual member. And I doubt not that you will have the additional satisfaction of feeling, even if you do not meet with substantial reward, that you will have done at least your best to deserve it. You will have secured, at any rate, a position which enables you to benefit suffering human nature. It speaks well for the absorbing nature of our profession to find that there are those who are willing to surrender their ease, their wealth, and sometimes their health, and even life, in the pursuit of medicine; for as a means of making money medicine has no place with many other callings."

Dr. Boxall then passed to the consideration of the subject of his address:]

THE PUBLIC, THE PROFESSION, AND MEDICAL CHARITIES.

"The special observations which I have to make are based upon the relations subsisting between the public, the medical profession as a whole, and medical charities. The first point which I shall touch upon is of interest alike to the public and to the profession—to the public, which finds it necessary now and again to call in a medical man in case of illness, and to the profession, which practises upon the public and to no small extent derives its livelihood by ministering to the various ills to which human flesh is heir. It must rest with a future lecturer to determine to what extent the recent addition of a fifth year to the medical curriculum will affect the number of practitioners drafted into the profession. To me it seems

[1] Vide THE LANCET, Oct. 11th, 1884.

doubtful whether, in a calling where so many subjects have to be mastered, the additional year will, as some members of the profession seem to anticipate, appreciably affect the number of those who enter within its portals. But, however that may be, it is certain that for some years past the number of medical practitioners has steadily increased. At the same time, it must not be forgotten that the population has in the meantime been increasing also, though, as I propose now to demonstrate, not quite in corresponding ratio. In order to test the matter I have constructed a table (Table I.) giving the number of medical practitioners [2] and the population [3] in England and Wales for each of the last sixteen years—1878 to 1893 inclusive. The proportion of medical practitioners to population is given in the form of a diagram (Chart I.), the scale of which indicates the average number of people to each medical man in England and Wales. From this it appears that starting in 1878 with 1645 souls apiece, the number gradually rose in 1882 to 1703, and since that date has steadily declined to 1451 in 1893. It will be observed that during the last twelve years the diminution has been progressive, and indicates a falling off of very nearly 250 people to each practitioner. When account is further taken of the protracted wave of financial depression which has been sweeping over the country of recent years, it is possible in some small measure to realise the fact—too patent, alas, to many a medical man, though not equally so to his patients—that the earning capacity of the unfortunate medical practitioner has been seriously curtailed. But in a general way such is indeed the case. As a result, many a piteous cry has been raised in the medical Press. In this connexion I make passing allusion to the counter-prescribing of chemists, and to the competition offered to regular practice by quack remedies and patent nostrums, to the success of which the profession itself has, as I have already hinted, by educating the public to an all-prevailing faith in drugs, in no small measure contributed. The remedy, therefore, lies in great measure in our own hands. Sick benefit clubs and medical aid associations run on coöperative principles have also contributed not a little to diminish the legitimate earnings of the profession, especially in the rural and manufacturing districts. I regret that I am not able to lay before you any figures which would adequately express the bearing of these matters on the financial question. But there is another aspect of the question which admits of fuller consideration. I allude to the alleged depletion of the pockets of the medical profession by competition offered by hospitals and other quasi-charitable institutions, which provide medical attendance gratis or for a mere nominal charge. In the same Table (Table I.) I have collected the number of hospitals and dispensaries for each year. Convalescent institutions, being on a somewhat different footing, demand separate treatment. I presume that no one will be found to cavil at the continued development of such useful charities, which will be seen to have increased in sixteen years from 25 to 85. We more especially rejoice in the fact that a new convalescent home, specially associated with the Middlesex Hospital, will ere long be opened at Southend. But it is not with the subject of convalescent homes that I propose now to deal. On referring to the table it is evident that the hospitals and dispensaries have considerably increased in number during the last sixteen years. But, again, I would inquire, Is this increase out of proportion either to the number of medical men or of population? To this question the last two columns of the table afford an answer. First, as regards the relation of hospitals and dispensaries to medical practitioners, it is evident that the institutions have not increased out of proportion to the latter, but rather the reverse. For, whereas in 1878 one hospital or dispensary existed among any twenty medical practitioners, it will be found that in 1893 there is only one such institution among every twenty-two members of the profession. Secondly, with reference to the proportion of hospitals and dispensaries to population, it will be found again that the institutions have not increased unduly. The result, given in figures in the table, is graphically represented in Chart II. In 1878 there existed one hospital or dispensary among every 33,000 inhabitants; in 1893 one among every 32,000 people. This increase, however, is in great measure due to the institution of separate borough and county asylums. The lunatic asylums, which numbered 5 in 1878, and 6 and 7 in 1886 and 1887, rose during the following years to 85, 88, 91, 92, 92, and 92 respectively. Thus much for the number of hospitals. It will naturally be urged that, though medical charities have shown no marked increase as compared with population, yet the number of patients receiving treatment in such institutions to-day is far greater than it was some years ago. This contention finds expression in 'Hospitals and Asylums of the World,' [4] from which it will be seen that the out-patient departments, especially of the large hospitals with medical schools, have more especially become the subject of adverse criticism.

"The contention contained in these passages has so frequently found expression of late that I deemed it not unprofitable to test the matter. The result of my observations I now lay before you, and would invite your attention next to Table II. In the year 1878 I find mention of 755 hospitals and dispensaries in England and Wales, which are returned as having provided attendance for 2,855,644 patients; or, rather, I should say that the greater majority were directly so returned. For the rest—a small minority, where no return was available—an estimate has been provided in accordance with the number of members on the acting medical staff. In the year 1893 the number of hospitals and dispensaries returned had increased to 928, and the patients attended to 3,985,263, being an increase of more than 1,000,000 in the sixteen years.

"In the next table (Table III.) the figures given in the preceding table are expressed in such a form that the two years 1878 and 1893 may be conveniently compared. From this it appears that the proportion to population of patients receiving hospital and dispensary treatment has increased 2 per cent.; that the average number of patients treated at each hospital and dispensary has increased by over 500 and by each member of the acting medical staff by 50 now as compared with sixteen years ago. In other words, each institution has, speaking generally, slightly increased its staff, but not in proportion to the extra number of patients attended. Each medical man, therefore, on the staff of these institutions does more work now than formerly. I have already demonstrated that the number of hospitals and dispensaries now in existence has increased slightly out of proportion to population, though not out of proportion to the number of members in the medical profession. I have also demonstrated that though the number of institutions has evinced but little proportional increase, the number of patients attended in each has increased considerably, and has been accompanied by a slight though scarcely proportional increase in the acting medical staff. It remains to determine whether the increase has been brought about entirely or in great part by the overgrowth of the out-patient department, and whether this has taken place, as has been alleged, particularly in the larger London hospitals with medical schools attached.

"In Table IV. will be found the average number of in- and out-patients, together with the average number of medical officers on the acting medical staff of all the hospitals, London and provincial, in respect of which the figures are stated. I have divided these hospitals in order the easier to institute a comparison into two separate categories. In the one category are included only those institutions which are the same for both years, 1878 and 1893. The other comprises institutions which existed in one or other of these years only. Further, with regard to London I have dealt separately with the general hospitals with medical schools in the same way. In studying this table it must be borne in mind that, in addition to those therein enumerated, there are many hospitals in the case of which the number of in- and out-patients is not separately stated, and which, in consequence, do not find place in the table. The figures, therefore, must not be taken to indicate by any means the total number of in-patients or of out-patients, but merely to indicate the relative proportion existing between the two. The comparative result is set forth in the following table (Table V.), to which I would now invite attention. From this it is evident that the relative proportion of in- and out-patients remains precisely as it was, not only when England and Wales, as a whole, but also when London and the provinces are separately considered. Incidentally it may be noted as a point of some interest that the proportion of out-patients to in-patients in London is nearly double what

[2] The figures given are taken from Churchill's Medical Directory of the following year.

[3] The figures, estimated to the middle of the year, are taken from the Registrar General's Reports.

[4] Hospitals and Asylums of the World. H. C. Burdett. Vol. iii., 1893, p. 218 et seq.

it is in the provinces. As regards the large metropolitan hospitals with medical schools compared with other institutions in London, an exactly corresponding relation has been preserved in the proportion of in- to out-patients, and the number of out-patients is, in point of fact, rather less in proportion to in-patients now than it was sixteen years ago. But in the case of the more recently founded hospitals and large general hospitals is unwarranted, at least in comparison with what might be said of more recently established institutions, most of which have no teaching functions to fulfil. It is an undoubted fact that in all the hospitals the number of out-patients has increased; but so, also, has the number of in-patients; and an outcry against the one is no more justified than an outcry against the other. But, inasmuch as

TABLE I.—*Showing the Proportion of Medical Practitioners to the General Population, and of the Hospitals and Dispensaries to Medical Practitioners and to the General Population, in England and Wales for the Years 1878 to 1893.*

Year.	Medical practitioners.*	General population.†	Proportion of practitioners to population.	Hospitals and dispensaries.*			Convalescent institutions.*	Total.	Proportion of hospitals and dispensaries to	
				London.	Provincial.	England and Wales.			Medical practitioners.	General population.
1878	15,217	25,033,259	1 : 1645	178	577	755	25	780	1 : 20	1 : 33,156
1879	15,183	25,371,489	1 : 1671	175	584	759	26	785	1 : 20	1 : 33,427
1880	15,313	25,714,288	1 : 1679	178	586	764	26	790	1 : 20	1 : 33,657
1881	15,504	26,046,142	1 : 1701	177	589	766	28	794	1 : 19	1 : 34,002
1882	15,462	26,334,942	1 : 1703	178	586	764	28	792	1 : 20	1 : 34,469
1883	16,192	26,626,949	1 : 1644	176	590	766	27	793	1 : 21	1 : 34,759
1884	16,564	26,922,192	1 : 1625	184	581	765	31	796	1 : 21	1 : 35,192
1885	16,978	27,220,706	1 : 1603	182	617	799	36	835	1 : 21	1 : 34,068
1886	17,395	27,522,532	1 : 1582	187	620	807	41	848	1 : 21	1 : 34,104
1887	17,893	27,827,706	1 : 1556	190	632	822	45	867	1 : 21	1 : 33,853
1888	18,236	28,136,258	1 : 1542	189	669	858	45	903	1 : 21	1 : 32,792
1889	18,792	28,448,239	1 : 1513	183	674	857	45	902	1 : 21	1 : 33,195
1890	19,021	28,763,673	1 : 1512	193	694	887	46	963	1 : 21	1 : 32,429
1891	19,319	29,082,585	1 : 1505	194	702	896	71	967	1 : 21	1 : 32,458
1892	19,810	29,405,054	1 : 1484	209	704	913	83	996	1 : 21	1 : 32,207
1893	20,487	29,729,506	1 : 1451	215	713	928	85	1013	1 : 22	1 : 32,036

* From the Medical Directory of the following year. † Estimated to the middle of the year from the Registrar-General's Reports.

TABLE II.—*Giving the number of Hospitals and Dispensaries, and of Convalescent Institutions in England and Wales, together with the Acting Medical Officers and the Patients treated, during the years 1878 and 1893.*

	1878.			1893.			Increase in Sixteen Years.		
	Hospitals and dispensaries.	Acting medical staff.	Patients.	Hospitals and dispensaries.	Acting medical staff.	Patients.	Hospitals and dispensaries.	Acting medical staff.	Patients.
A. HOSPITALS AND DISPENSARIES.									
(1) In London	178	1066	1,561,566	215	1483	2,147,600	37	417	586,034
(2) In the Provinces	577	2311	1,294,078	713	2971	1,837,663	136	660	543,585
(3) In England and Wales	755	3377	2,855,644	928	4454	3,985,263	173	1077	1,129,619
B. CONVALESCENT INSTITUTIONS.									
(3) In England and Wales	25	43	17,144	85	147	55,017	60	104	37,873
Total	780	3420	2,872,788	1013	4601	4,040,280	233	1181	1,167,492

TABLE III.—*Showing the Proportion of Patients receiving Hospital and Dispensary Treatment to Population, the Average Number of Acting Medical Officers attached to each Hospital or Dispensary, and the Average Number of Patients treated by each Acting Medical Officer, in England and Wales, for the Years 1878 and 1893.*

	In 1878.	In 1893.	Difference.
Proportion of patients receiving hospital and dispensary treatment to population	11·4 %	13·4 %	+ 2·0 %
Average number of patients treated at each hospital or dispensary	3782	4294	+ 512
" " acting medical staff at each hospital or dispensary	4·4	4·8	+ 0·4
" " patients treated by each acting medical officer	845	894	+ 49

dispensaries in London, it is evident that the proportion of out-patients to in-patients is very largely in excess in comparison with the older institutions—in fact, nearly double. In the provinces the more recently established preserve the same relation between in- and out-patients as the older institutions. From all which it is manifest that the outcry which has been raised against the out-patient departments of the medicine is in itself a progressive science, it would be a wonder indeed if those institutions, the medical charities of Great Britain, which have long been the admiration and wonder of the whole civilised world, should fail, as years roll on, to enlarge their walls and to increase the scope of their utility. As the sound of the bricklayer's trowel and carpenter's hammer is destined soon to reach our ears in providing

additional wards and laboratories, you may judge that the Middlesex Hospital and School certainly does not intend to be behindhand in that respect.

"Before finally dismissing the subject from consideration, I have still one word yet to add with reference to the alleged insufficiency in the acting staff of the larger hospitals to adequately cope with the increased number of patients. In the last column of Table V. will be found a statement of the increase in the average number of patients attended annually by each member of the acting medical staff now as compared with sixteen years ago. From this it is evident that as regards the older institutions there has been an increase all round in the work thrown upon each member of the staff both in London and the provinces, and that in the large general hospitals in London the work has become more exacting than elsewhere. But this is a matter for which it is comparatively easy to provide a remedy. To sum up, then, I have shown that the number of medical men has for the last twelve years steadily increased in proportion to population, and that this, associated with a period of general financial depression, has appreciably diminished the aggregate earnings of the profession. I have merely referred to other causes which have also tended to deplete the pockets of the medical man. But with regard to hospitals and other charitable medical institutions, I have shown, in the first place, that their number has barely kept pace with the members of the profession, and is but little in advance of increase in population; and, in the second place, I have shown that, though the total number of patients receiving treatment at hospitals and dispensaries has increased by as much as 2 per cent., the increase which has taken place in the recipients of hospital treatment is, generally speaking, equally divided between in- and out-patients; and, further, that while the increase in the

TABLE IV.—*Giving the number of In- and Out-Patients and the number of Acting Medical Officers attached to those Hospitals and Dispensaries in which the number of In- and Out-Patients is stated for the Years 1878 and 1893.*

—	1878.					1893.				
	Number of Institutions.	Acting medical staff.	Patients.			Number of Institutions.	Acting medical staff.	Patients.		
			In-.	Out-.	Total.			In-.	Out-.	Total.
(1) IN LONDON:										
Same institutions in both years.										
General Hospitals with Medical Schools ...	6	135	21,259	287,133	308,392	6	157	28,571	366,905	395,476
Other Hospitals and Dispensaries	35	263	16,659	229,818	246,477	35	344	27,978	344,014	371,992
	41	398	37,918	516,951	554,869	41	501	56,549	710,919	767,468
Different institutions in both years.										
General Hospitals with Medical Schools ...	2	45	7,608	88,751	96,359	1	24	2,605	36,999	39,604
Other Hospitals and Dispensaries	1	1	94	300	394	18	130	6,037	135,801	141,838
	3	46	7,702	89,051	96,753	19	154	8,642	172,800	181,442
	44	444	45,620	606,002	651,622	60	656	65,191	883,719	948,910
(2) IN THE PROVINCES:										
Same institutions in both years	205	1133	83,853	618,621	702,474	205	1374	128,165	929,185	1,057,350
Different institutions in both years	9	36	648	21,071	21,719	43	191	9,010	65,124	74,134
	214	1169	84,501	639,692	724,193	248	1565	137,175	994,309	1,131,484
(3) IN ENGLAND AND WALES:										
Same institutions in both years	246	1531	121,771	1,135,572	1,257,343	246	1875	184,714	1,640,104	1,824,818
Different institutions in both years	12	82	8,350	110,122	118,472	62	345	17,652	237,924	255,576
	258	1613	130,121	1,245,694	1,375,815	308	2220	202,366	1,878,028	2,080,394

TABLE V.—*Showing the relative Proportion of In- to Out-Patients, and the Average Number of Patients treated annually at each Hospital and by each member of the Acting Medical Staff in the Hospitals and Dispensaries in London, in the Provinces, and in England and Wales, for the Years 1878 and 1893.*

—	Relative proportion of in- to out-patients.			Average number of patients treated annually					
				At each hospital.			By each member of the acting medical staff.		
	In 1878.	In 1893.	Difference.	In 1878.	In 1893.	Difference.	In 1878.	In 1893.	Difference.
(1) In London	1 : 13	1 : 13	Same.	14,809	15,815	+ 1,006	1467	1448	- 19
(2) In the Provinces	1 : 7	1 : 7	Same.	3,384	4,562	+ 1,178	619	722	+103
(3) In England and Wales	1 : 9	1 : 9	Same.	5,332	6,429	+ 1,097	852	937	+ 85
(1) IN LONDON.									
In 6 General Hospitals with Medical Schools	1 : 13	1 : 12	Less.	51,398	65,912	+14,514	2284	2518	+234
In 35 other Hospitals and Dispensaries	1 : 13	1 : 12	Less.	7,042	12,628	+ 5,586	937	1081	+144
In 18 other Hospitals and Dispensaries which do not appear in the 1878 Directory	—	1 : 22	—	—	7,879	—	—	1091	—
(2) IN THE PROVINCES.									
In 205 Hospitals and Dispensaries	1 : 7	1 : 7	Same.	3,426	5,157	+ 1,731	620	769	+149
In 43 other Hospitals and Dispensaries which do not appear in the 1878 Directory	—	1 : 7	—	—	1,724	—	—	388	—

out-patient department in the large metropolitan hospitals with medical schools and in the other ancient foundations has barely kept pace with the increase among the in-patients, in the more recently established hospitals in London the proportion of out-patients to in-patients is on a very much larger scale. It is not for me to offer a suggestion by way of remedy, but I recognise that it is a matter which requires careful consideration. For to allow the well-to-do to become the recipients of charity destined for their poorer neighbours is detrimental alike to the best interests of the public, of the profession, and of medical charities themselves; of the public, from danger of the more needy cases being crowded out and by encouraging improvidence; of the profession, because increased work is thrown on the already fully-occupied honorary officer, and many a fee which might otherwise with advantage find its way into the pocket of one or other of our professional brothers is dispensed with; and of the charities themselves, by tending to bring them into disrepute and into unfair competition with the hardly used medical practitioner. The medical profession, altogether apart from hospitals, does a vast amount of charitable work, for the most part unrecognised and unappreciated save by the immediate recipient, and not even always that; and this it does without thought or hope of reward. It redounds to the credit of our calling, and tends to ennoble it, that such service should be ever cheerfully rendered. That being so, and for that very reason, it behoves us to be ever on our guard against imposture, and on occasion to insist upon our due. It does not conduce either to the dignity or honour of the profession tacitly to submit to imposture or injustice. Moreover, we have a duty in this respect (unpleasant though it be) to perform on behalf of others, if not of ourselves. I need but allude to the many monstrous charges which have been hurled of late years against some of our members in their professional capacity. It is a subject for congratulation that the profession has to some extent awakened to a due sense of its responsibilities and that collective action (imperfect though it be) has been taken to protect our members and to secure our rights. These, gentlemen, are considerations which will sooner or later force themselves upon your attention when the day of entering upon practice arrives. Let me, therefore, thus early commend them to your notice. For the rest, I shall content myself by dismissing you with a quotation from the writings of a member of our own profession in the New World, whom the whole English-speaking community has delighted to honour, and whom we are glad to find is still spared, though full of years, to charm us with flashes of his brilliant intellect.[5] 'Go, then, to meet your chosen Science, who waits for you like a bride adorned with her ancestral jewels and crowned with fresh-gathered garlands. How chequered with the ever-glancing sunbeams and ever-flitting shadows of joy and of sorrow is the long path to which she beckons your eager footsteps. Go forth from these courts of learning, armed with the borrowed wisdom of age, yet ever cherishing the tender sympathies of childhood. The distant murmur which you hear from the trampled fields before you will soon grow louder in your ears, and you will find yourselves swept into the whirlwind of the world's tumultuous conflict. Go forward in hope and serene courage; Disease is calling for you from his bed of anguish; Death is looking for you to smooth his pillow; Posterity is expecting you, impatient to be laid in his cradle.'"

[5] The Position and Prospects of the Medical Student; an address delivered before the Boylston Medical Society of Harvard University, Jan. 12th, 1843, by Professor Oliver Wendell Holmes.

A WELL-EARNED RETIRING PENSION.—On Sept. 15th a very largely attended meeting of the board of guardians was held in Kells, county Meath, to consider the granting of a superannuation pension to Mr. Ringwood, the retiring medical officer of the Kells Workhouse and Fever Hospital. There were forty-six guardians present, and the proposal that the largest pension in their power to grant—viz., two-thirds of his present salary (£110)—be granted to Mr. Ringwood was carried unanimously. Several guardians spoke in terms of the warmest praise of the manner in which Mr. Ringwood had discharged his duty during the past twenty-five years, and general regret was expressed that the state of his health should have compelled him to tender his resignation. All present joined in bearing testimony to the zeal, kindness, and attention shown by him to the sick and poor under his care during his office, and in wishing that he might long be spared to enjoy his well-earned pension.

An Address
ON
THE RELATION OF LITERATURE TO SCIENCE.

Delivered to the Students of Mason College on the occasion of the Annual Meeting for the Distribution of Prizes on Monday, Oct. 1st, 1894,

BY W. MACNEILE DIXON, LITT.D., M.A., LL.B. DUBLIN.

MR. PRESIDENT, MR. PRINCIPAL, LADIES AND GENTLEMEN,—The success of a college like this is sufficient proof, if indeed any proof were required, that the English mind of to-day is keenly alive to the important truth that knowledge is power, is keenly alive to the practical utility of knowledge. It can hardly, I think, be said that there is a present need for any of us to be reminded of the value of knowledge, of the indispensable part it plays in social and individual welfare; we are already convinced of it. We are indeed accustomed daily to congratulate ourselves on the marvellous widening of the horizon of what is known, and on the remarkable spread of general and even special information among the people. We have been led, too, by the writers and speakers upon education, and upon social, economic, and kindred questions for many years past, to expect great things from this increase and from this spread of knowledge. Mr. Herbert Spencer and other scientific writers have raised our expectations by their splendid confidence in the diffusion of knowledge, especially a knowledge of science, and have taught us to believe that ignorance is the only serious barrier between the present condition of society and a veritable Utopia. We are all impressed by this view of the latter-day teachers. A great deal can be said for it; and yet some of us are forced to confess that we cannot share their confidence—some of us, perhaps—because we are by nature of less sanguine temperament, are disappointed, and are forced to confess our disappointment. The good seed has been diligently sown; but the harvest has not realised our expectations, nor is there any assurance that the future will realise them. We put our trust in education, and we have not found in it—at least in the accepted methods of education—the sovereign remedy for the ills of society. That many and capital results have followed the sowing of the seed it would be idle to deny: capital results are apparent; but there is none the less present with some of us a disheartening sense that all is not well; that the progress we have made, though valuable, is not of the best kind; that we have not followed the *vera lux*, but have rather allowed ourselves to be led by a bright but erring star. It suffices not that we have learnt to have our wits about us, that an edge has been put upon many of our mental faculties, that vast continents have been added to man's intellectual empire. Even these gains do not suffice; some of us remain unsatisfied, and go about with the query on our lips, "How comes it that we see knowledge, wide and widening, a multiplication of the arts and sciences, side by side with so much that offends the eye, and offends the reason, and offends the heart in our modern civilisation?" The remedy in which we trusted has not penetrated deep enough; the changes that have been brought about are surface changes; and so it comes that our confidence in the absolute efficacy of knowledge has been shaken, and we are now suffering disillusion. The results, too, even in the cases that we should imagine would display this efficacy most triumphantly, often dishearten us still further. How dry and hard, how socially valueless, how intellectually uninteresting, how spiritually barren even the scholar or the man of science too frequently becomes, so much so that in moments of despondency one is inclined to say hastily that education is a failure, that human nature is not affected by it, or to exclaim, "How cheap a thing is scholarship when weighed in the scales with pure humanity, with magnanimity, with moral breath, depth, and simplicity." Education is not indeed a failure; human nature is disciplined, armed, and inspired by it if it be education of the right stamp, but we are suffering disillusion as regards the absolute efficacy of knowledge. Mr. Herbert Spencer and the writers upon

education no longer inspire us with their confidence. And it seems probable that we shall be still further disillusionised, and this time more seriously, not merely as regards knowledge, but even the intellectual powers which it nourishes; for in a recent and able work, Mr. Kidd's "Social Evolution," dealing with the largest social problems, our intellectual supremacy, the intellectual supremacy of the modern world and of the nineteenth century, is very strictly questioned. It appears that we are not nearly so clever as we had imagined ourselves, that the marvellous accomplishments of modern civilisation, upon which we rest our claims of intellectual pre-eminence, are due to small accumulations of knowledge slowly and painfully added by many minds through an indefinite number of generations, and that these minds have not been at all separated from the general average, or even from the minds of other races of lower social development, by any great intellectual interval. And, moreover, it is said—and excellent reasons are advanced in support of the statement—that it is to ethical and religious and not at all to intellectual qualities that the progress of the race must be ascribed. Assuredly knowledge is not everything; it is not everything to have our wits about us, to have great stores of useful information, to have an edge on the mental faculties. There are other and perhaps better things of which our methods of education take little or no account. Our methods of education take account of knowledge, and of the training of certain useful intellectual faculties, for these things have a definite market value. A career is nowadays open to a well-equipped mind as in old days a career was open to a sharp sword and dexterity in wielding it, and we are thus led to high estimates of the value of knowledge and mental dexterity. People are willing to pay for these things, and we address ourselves in our schools and colleges and universities to the task of imparting knowledge that possesses a market value, and training the faculties that command success. I do not think that I am here misrepresenting the methods of education we adopt as a nation, and I am anxious, since the privilege has been granted me of addressing you on some subject appropriate to the place in which we are met—I am anxious to ask whether we do right in pursuing exclusively these methods, in prizing so highly knowledge and mental dexterity; and whether we might not find ourselves more nearly right if we were to make certain other powers and attainments the measure of perfection, if we were to recognise how much of man's life falls outside of the intellectual sphere, and if in our methods of education we were to take into serious account the whole and not a part only of human nature—if, in short, we were to recognise what I may speak of as the sovereignty of the heart as well as the sovereignty of the head. I am very far indeed from suggesting that it is not an honourable and fitting thing that our education should be made practical and possess a market value, but there are two things we must look to. We must see to it that our education shall result in real and enduring gain to the individual, and in real and enduring service to society. For it is not enough—it is not even wise—to arm the individual with weapons for his personal aggrandisement if you do not at the same time inspire him with an honourable zeal for public ends. Education for the people will not benefit society, it will not benefit the world, if it be not accompanied, as are the discipline and skill of the soldier, with the spirit of loyal attachment to the honour and fortune of the State. There is a diffusion of knowledge that can serve the community. It is knowledge that belongs to a man with catholic aims—a knowledge that clears the mental vision, braces the judgment, but also broadens the imagination and the sympathies and thus assists in the realisation of the soul.

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To me it seems clear, at all events, that of the various needs, instincts, and powers of man we are to-day losing sight of and neglecting the more pressing, the more serviceable, whether for the individual or society. What we need to-day, what we desire as a result of education, is not so much knowledge and mental dexterity: we want a sane mental attitude, we want sanity and serenity, we want temper. What I wish to know about the man with whom I am to associate is his mental attitude, his temper. I am not so much concerned with—I do not greatly care to know the number of the languages he has acquired—the number of the sciences of which he is master. These acquisitions on the part of an individual may result in little social advantage, in little vital refinement. They may be the source of present satisfaction, they may also be a source of personal gain, but the possessor of them is not always a good citizen, a sure thinker, a man whose companionship is profitable and pleasing. And, again, it is not in the power of every man to become a scholar. To become a scholar one must spend one's life with books, and that is a life, not without disadvantages, reserved for the few. But it is in every man's power to become a good citizen, an agreeable companion, to cultivate breadth of judgment, cheerfulness, and serenity of temper, to desire and study to obtain moral and intellectual dignity. And not only because all men cannot be scholars, cannot indulge in what Herder called "the luxury of knowledge," but for many other reasons also, in the education of the citizen we look to social and ethical qualities, the qualities that I have tried to sum up as represented by the phrase "the sovereignty of the heart." Mental freedom and receptiveness, moral breadth and sincerity, the interdependence of the mental and moral faculties recognised, these are our needs; or, in other words, there is no vital refinement without character: this is the important truth for us to realise. For "the morals," as Emerson says, "must be the measure of health. If your eye is on the eternal your intellect will grow, and your opinions and actions will have a beauty which no learning or combined advantages of other men can rival." Or, to express it in Plato's words, "In the world of knowledge the idea of good appears last of all, and is seen only with an effort; and when seen it is also inferred to be the universal author of all things beautiful and right, parent of light and of the lord of light in this world, and the source of truth and reason in the other, and is the power upon which he who would act rationally either in public or private life must have his eye fixed."

A recognition, then, of the dual sovereignty under which we must live—the sovereignty of the head, the sovereignty of the heart—will assist us as individuals, will assist us as a nation, in pushing forward the progress of the world and hastening whatever of good the future holds for man. And with quiet minds we may contemplate and await the future. The course of the world has not yet proved cleverness to be better than wisdom, and upon the brow of justice the crown is still inviolate. However long one listens to the voices that praise success on lower planes, one is not persuaded. There is no authority in these voices, and the ear of mankind is attuned to higher strains. And so it is that we demand more of ourselves, and seek after the best things, and are not satisfied with knowledge and mental dexterity. But our methods of education have set these up as standards of attainment, and it is a noticeable fact that to improve the standard, to raise it, our writers on education and our university men can think of no other expedient than simply to increase the amount of knowledge required, and to make examinations, which are the recognised test of progress in education, more difficult. And we go on increasing the amount of knowledge required in the application of our customary tests until it is quite marvellous how much the brain of very average intelligence, skilfully treated, will hold, and also quite marvellous how indifferent the power of thought and how slight the vital refinement that are the result. And so it seems as if we were almost at a standstill, not knowing where to turn in order to widen our conception of a liberal education, and reduced to continue mechanically raising the standard, as it is called, by demanding more and more information and greater mental readiness. But there are many of us to be reckoned with who cannot admit that this is in any acceptable sense a raising of the standard, for truly to do so involves much that is not thought of in this process. It involves a realisation of powers in ourselves besides memory or even high intelligence, powers of imagination and conduct and feeling and sympathy; it involves a recognition of how much of life lies outside the sphere of pure intellect; it involves different measures of attainment to those furnished by examinations, and honour given to different types of character to those to which the crowd does homage. The utilitarian view of education—making livelihood more than life—which has somehow mastered us is fatal to that ideal of it which includes finer moral feeling, a keener sensitiveness to beauty, a nobler scale of ambition, a choicer growth of affections.

Breadth, lucidity, insight, sincerity, harmony, tranquillity, amiableness, magnanimity—these are some of the words we would have added to the vocabulary used by our writers and speakers on education. These words carry with them a larger conception of human life, a deeper sense of its meaning and dignity, a deeper sense of beauty, intellectual and moral. How are we to secure in our methods of education such qualities as breadth, lucidity, insight,

sincerity, harmony, tranquillity, amiableness, magnanimity? That is, of course, the difficulty. These qualities are vastly harder of attainment than a goodly amount of knowledge and mental readiness, they dwell in a region well-nigh inaccessible. And there is also the difficulty that even to speak of these things is to be liable to contempt as being unpractical. I am well aware how unpractical all this must sound; but, fortunately, I am not very greatly in awe of what is usually called the practical view of things, though it is a hard matter to persuade people that such a view is not necessarily ripe with the highest wisdom. People not infrequently cloak their dislike of ideas, their incapacity to entertain ideas by an insistence upon this so-called practical view, which comes to be, as a rule, the traditional, the easiest, and the least complete view, whereas the only really practical view is that which takes in all the facts. Briefly, I think we may say that if the qualities represented by the words I have just used are desirable it is not open to us to speak of any effort to attain them as unpractical; and I may say for myself that I am far, indeed, from playing with words or from speaking with any feeling but one of grave seriousness in this matter. The sad earnestness of modern life forbids trifling and constrains sincere effort to see things as they are and to conceive them as they should be.

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In the academy of the world's past the student corrects his impressions of life by a comparison of them with the impressions of greater minds; his ambitions are enlarged and purified by an estimate of the value of the ambitions that the long centuries have cherished; in his realisation of the world's sorrow his emotions are deepened, in companionship with its joys his joys are increased, and in his own mingle the elements of universal thought. There is no part of the majestic order of things, there are no harmonies of nature, that may not be shared by him, and there abides continually before him the vision of "a world unrealised." The education we shall learn to prize will be such as serves us in every duty of life, public and private, and in hours of reckoning with ourselves affords us glimpses that continually restore, encourage, and confirm. I should like myself, did it lie in my power, to show what fortifying and consoling glimpses might be the reward of earnest study in the school of letters, for example, the subject in which I am myself specially concerned. Almost any study will, I believe, if properly followed, put an edge upon the intellect; but for the student who looks for more than this the choice is perhaps a narrower one. For my own part—and you will allow that it is natural in me, and so perhaps pardonable—I feel the influences of literature very strongly, more strongly than I feel similar influences from other studies; and for one who thinks that "the whole life of man stands in need of grace and harmony" there can hardly be a wiser choice than literature among the various studies to which a student may apply himself. Not that it need be an exclusive study. There is too much made of what is called the "conflict of studies"; we cannot afford to neglect any opportunity to enlighten or to enlarge our minds. No man, indeed, can make himself master of all branches of knowledge or even of any one branch, but to profit by a study it is fortunately not imperative that it should be mastered in its entirety. You may make some profitable acquaintance with the results at least in many departments of science, though your direct path lies elsewhere; your friendship with Plato or Dante or Shakespeare will make no impossible demand upon your time, nor can it weaken your grasp in the region of mathematics or geology. It seems curiously difficult for the average human mind to entertain more than one idea at a time, and we are not yet safe, from attacks upon literature and the study of literature by men of science, and attacks upon science and the value of science by men of letters. But I think we are now nearly safe, and that in this college the English feeling of to-day is represented, where science and literature are sworn allies and have buried deep the weapons of their former warfare. It has indeed frequently been shown that the study of literature is itself a science, and it is to be remembered that in some sense the man of science is also a student of literature, for he is a student of our most ancient document. In its broadest meaning all that is preserved in writing, *literæ*, the written or printed thing, includes much more than books. That great living being, the World, as the Stoics feigned it, wrote its pre-human history in the beds of rivers, in the hieroglyphics of ice-worn or fire-fused rock, in the débris of primæval forests, and in the mammoth skeletons of its earliest inhabitants. This is the literature in which the geologist, the paleontologist, is versed. And even that terrible person, the pure mathematician, who lives upon the delights of abstract quantities and the relations of things at infinity, is a reader of the literature of curves and angles supplied in the Book of Nature.

Abstracts
OF
INTRODUCTORY LECTURES ETC.
DELIVERED AT THE
LONDON AND PROVINCIAL MEDICAL SCHOOLS
AT THE
Opening of the Session 1894-95.

GUY'S HOSPITAL.

PAPER READ BEFORE THE PHYSICAL SOCIETY BY MR. LOCKHART STEPHENS.

A PAPER was read by Mr. Lockhart Stephens on "Medical Education in relation to General Practice" at the opening meeting of the Physical Society at Guy's Hospital, of which the following is an abstract:—

"It is customary, upon a great occasion like the present—and the opening of the Medical School of Guy's Hospital is a great event in the lives of those who are now entering the profession—for the reader of a paper or the person who is to deliver an address to express (1) his gratitude for the honour conferred upon him, and (2) a deep sense of his own unworthiness to perform the task allotted to him. I feel bound to observe this custom, for the presidents of the Physical Society, putting aside the practice of former years, have forsaken the golden fairyland of the West-end consultants, or even the placid affluence of the large provincial towns, and have directed their kind invitation to one who can only claim to be a 'country doctor,' a 'general practitioner,' but still a Guy's Hospital student. I desire to acknowledge very sincerely the honour paid, through me, to the 'Guy's' general practitioners. In attempting to collect and put on paper my ideas on the wide subject of medical education I could not but be conscious of my own weakness, of my inability to reach anything like the lofty height of such an address as that which was delivered here in 1868 by the late Dr. Moxon, and which I ask you all to read (you will find it in the *Gazette* of January last and in that charming volume, 'Pilocereus Senilis'), or even of how powerless I was to offer you such valuable advice as did my distinguished predecessor, Dr. Beale. The work of a general practitioner is to deal not only with patients who are the victims of well-marked disease, but with that much larger section who are 'out of sorts'—a very ordinary line of practice—so that I can have only ordinary observations to offer to you."

[Mr. Stephens briefly reviewed the present position of medical education under the two headings: (1) those who intend to take a degree at one of the universities, and (2) those who intend to proceed to the qualification of the Conjoint Board. He dwelt upon the value of adequate and systematic scientific preliminary work, and upon the paramount importance of a thorough training in anatomy and an acquaintance with the problems of hygiene, and then proceeded as follows:]

"I now wish to say something on what may fairly be called the general practitioner's speciality—midwifery. Whether all have moved with the times and have adopted the strict antiseptic precautions which are now recognised as incumbent upon all accoucheurs is more than I am prepared to say. I fear not. There should be the most scrupulous surgical cleanliness in everyone and everything about a parturient or lying-in woman. You should be just as particular over a confinement as a hospital surgeon is over an ovariotomy. We know what antiseptics have done in that and in all other kinds of surgical practice, and we cannot but feel sure that it will be the same in midwifery when the practice is universal. In many instances parturition is a natural and purely physiological process; it will be a part of your education to recognise what is normal, to know when to leave well alone, and not to interfere unless some interruption in the

natural course of labour occurs. Beware lest a long run of normal cases should make you careless or indifferent, and you are, so to speak, caught napping. There can be no situation so painful and distressing as when a practitioner reflects that owing to some neglect or oversight on his part a patient suffers from fever or even succumbs to the exhaustion of labour. I do not say that all deaths in midwifery practice are preventable; far from it. There are cases which foil the most consummate skill; there are those which are too complicated for some, but which might have been brought to a successful termination by others, where, alas, the skilled help frequently arrives too late. Many a man in beginning practice has his future made or marred by the manner in which he conducts his first few cases of labour. One of his difficulties to be overcome will be a certain class of monthly nurse, frequently met with in the country, in many cases the personification of all things septic and objectionable. They do not understand, and will not be taught, the importance of the antiseptic douche before and after labour. Their influence with a patient is very great. I do not know why it should be so, but there are very few women who will not listen to an old monthly nurse and do what she says in preference to what the medical man says. I should like to see at least six beds in the hospital devoted entirely to lying-in cases for educational purposes, the nurses to be trained in midwifery work, and the students to be instructed in the management of normal labour. It is generally supposed that on commencing his work as extern the student is accompanied by the "junior in charity" to his first few cases. I have not the slightest recollection of such a thing occurring to me either as extern or as "charity"; but of course all this is different now. Would not the expense of maintenance of these six beds be more than compensated by the good derived from the observation of such cases? When one considers how many cases of midwifery are attended by so-called midwives, by nurses who have had good training in midwifery, and by general practitioners, it is surely most important that the practitioners at least should have had ample opportunity of learning thoroughly their work in this subject. Another very important feature in this class of work is the management of miscarriage. Many a valuable life has been sacrificed and many years of suffering and misery have been brought about by making light of a miscarriage. That terrible scourge of lying-in women, puerperal fever, will surely be relegated ere long to the list of preventable diseases. Due amongst other things to decomposing lochia bathing the raw surface of some overlooked rent in the perineum, direct contact of the medical attendant with an infectious case is the means of inoculation. Absolute antisepsis can alone rid us of this blot on our work. I should like to see established in connexion with Guy's Lying-in-Charity a collective investigation of several points in midwifery practice, directed by the obstetric physicians and worked at by past students in general practice. Many of us would be known personally to the directors, and by a little organisation I am sure that great and valuable results would be forthcoming. Then, again, how lax are we general practitioners over the matter of a lying-in woman getting up; the ninth day is what the old women will tell you. Have you ever seen the uterus of a woman who has died about a week or ten days after delivery? How far had the process of involution gone on? Would a surgeon discharge an amputation of the thigh on the ninth day? And yet this is what we tacitly do. How many cases of prolapsus uteri are due to too early getting about after a confinement? Are not some of us general practitioners to blame somewhat for this? I take this opportunity of saying a few words, based on several hundreds of cases seen in general practice, about one class of women—those who are suffering from anæmia. I have come across a good many, and my experience of them is that they are bad subjects for parturition; they soon become exhausted by the pains; they cannot bear an amount of hæmorrhage which to an ordinary woman would be trifling; they cannot safely be left at the usual time after delivery; they are prone to post-partum hæmorrhage. Briefly, whenever you know your future patient to be anæmic be on your guard. I will not say more on this important subject of midwifery than to beg of you to set this motto before yourselves in every case: 'Absolute cleanliness.'"

[Mr. Stephens then spoke eloquently of the important position occupied by the general practitioner in the community, and of the necessity that the medical man should recognise the delicacy of some of the parts he has to play, and concluded as follows:]

"All our leading public men, from Mr. Gladstone downwards, are constantly saying that the medical profession is 'rising in power and influence and general respect' year by year—that the profession is becoming more powerful and more important as time goes on. We have each to take our share of the responsibility in our own community, and very often the medical man has to take the lead; and the reason why his fellow men look to him to lead them is because his hospital education has qualified him well for the task. The nation should be proud of the medical schools of England. Gentlemen, one of the rules of the Physical Society, for which you will be thankful when your turn comes, is that no paper shall last longer than thirty minutes. I have already exceeded that time, and only your kindness and sympathy can prevent you from saying you are tired. Much that should have been said on medical education has been left unsaid; much has been said which would have been said better by many another. I can only wish that my paper, to which you have so patiently and courteously listened, had been more worthy of this occasion, this place, and this audience."

ST. MARY'S HOSPITAL.

INTRODUCTORY ADDRESS BY DR. SCANES SPICER.

AFTER a cordial greeting to new and old students the retention of the ceremony of the "introductory" was urged as a convenient excuse for the annual reunion of all interested in the Medical School. The various reasons for selecting medicine as a profession were considered. There has been (said the lecturer) an excessive amount of high falutin' about disinterestedness and philanthropy in connexion with medicine, as if medical men had a monopoly of these virtues. There is no record that the Good Samaritan was a physician. Boasts about our unselfishness are too often associated with an affected reticence concerning the business aspect of medicine, about which there is no ground for concealment or shame. If we only practise common honesty—the rule, in spite of the insinuations of cynics within and without the profession—the business aspect in no way detracts from the nobility of medicine as a vocation. The field of medicine is thoroughly overstocked, yet most medical men who can once get established secure a comfortable livelihood. Those who want to grow rich should avoid the profession. The social advancement of the medical profession of late years has been remarkable, and has been parallel with the wide general culture and interests of the average modern physician, who is something more than a mere prescriber of physic. Medical men are finding their way more and more into Parliament, into the Privy Council, and into the National Government. It is a grievance with the profession that it is not directly represented in the House of Lords, where the counsel of medical men would not only add to the efficiency of public work but signalise the national recognition of the value of Medicine to the community. It is, perhaps, not unfortunate for us that we share this injustice with the Press; and if, in seeking for a redress of this anomaly, the Press and Medicine were to combine their forces they might succeed in "mending the House of Lords" to the extent of remedying this injustice. Among the chief reasons for the hereditary adoption of Medicine as a profession is that a medical father sows the seeds of curiosity in his boy's latent faculties, tends the bud of awakening thought, and watches the blossoming of an ardent passion for the devotion of life to the elucidation of nature's mysteries. The new students were congratulated on having selected St. Mary's Hospital as their school for study, and the reasons for the progress of that hospital to its present position among the metropolitan hospitals were examined. Every student should arrange his early studies so that he can obtain an M.D. degree in due course. So few obtain the M.D. degree of the University of London because the relation of the Matriculation Examination to future medical graduation is not known to parents and teachers. Students intended for Medicine are thus not directed in the right course at a sufficiently early period of their general education. If this knowledge were more widely diffused, the clamour by the medical profession for a new University or for an easier M.D. degree in London would practically cease. It is much to be regretted that the University of London, in its present form, has not that controlling influence over medical education and graduation which a great University in this metropolis ought to have; and it is with some hope that all who wish to see every London student take the degrees of M.B. and B.S., and in due time proceed to

the M.D., are looking forward to the appointment of the Statutory Commission to effect the reorganisation of the University. The obstructive action of Convocation in resisting reform was to be deeply regretted. The nomenclature of the different classes of the profession needs thorough and radical revision. In the first place, all practitioners educated in London who have attained a certain seniority should be able to take an M.D. degree in London without more difficulty than those educated in Scotland and Ireland can take their M.D. at home, and so be entitled to call themselves "Doctor." In the next place, the absurdity of calling a general practitioner, a gynæcologist, or a laryngologist a surgeon rather than a physician, or *vice versâ*, is apparent; while all might equally be M.D.s. It was suggested that in order to give official recognition to special skill, prolonged research, or eminence as a teacher the new University might grant titles, corresponding somewhat to that of *privat docent* in a German university town, such as "Specialist" or "University teacher"; and, to mark still greater experience and distinction, the title of "Professor"; such titles not to be used by anyone unless conferred by the University. Advice was given as to methods of work and on the curriculum of study. Early practice in the use of all the various "'scopes" and speculums was insisted on, in order to avoid that sad resort of ignorance, only too often heard—the statement, "There is nothing the matter." Whereas a thorough knowledge of the profession is an indispensable condition of success, it requires much more than this to make the successful practitioner. Among these accessories are a sympathetic manner, cheeriness, and earnestness. The patient should always be treated before the disease. Hope is one of our most valuable remedies. The expectation of a good result is often half the battle. It should be the practitioner's undying resolve always to make the patient's welfare his first consideration, to give to his case his best thought and skill, and not to grudge his time in order to restore him to health as quickly, pleasantly, and safely as lies in his power. When in general practice he should not shun consultations. Patients are too well informed now-a-days to believe any of us infallible. A consultation is the means of giving the patient confidence as to the management of his case, and a second opinion is sure to throw some fresh light on the subject. In referring a case to a specialist the practitioner should always make it quite clear to him whether the case is sent for treatment or for an opinion only. The increase and development of specialism are among the most striking facts in the medical history of the latter half of the present century. Specialism is destined to play an even more important part in the development of medical art. Among the advantages of specialism are the detection of abnormalities overlooked by, invisible to, or unappreciated by the occasional observer; the slow, but sure, scientific advance from constant concentration of thought on one branch; the high degree of operative skill developed by constant practice and repetition of similar operations; the possibility of the specialist keeping well abreast of the tide of advancing knowledge in his branch and giving his patients the benefit of it; and, lastly, that the practice of a specialty gives more opportunities for leisure, and hence for cultivating other interests than medical ones. Specialism was defended from the charges of shallowness, self-sufficiency, and unscrupulousness that have been brought against it. All men who desire to become specialists should acquire a wide general experience before specialising. It has been well said that the modern specialist does not represent a fraction of medicine only, but the whole and a fraction more. Although he is a special cultivator of one branch, he is a complete clinician on the whole subject. Attention was drawn to the remarkable development attained in less than forty years in the specialty of diseases of the throat and nose, due chiefly to the truly marvellous results of local treatment—e.g., in post-nasal adenoid growths, in diseases of the nasal accessory sinuses, and in the various forms of obstruction of the nose, which condition, after long neglect, has at length obtained the same respect as a blocked windpipe, strictured gullet, or any other choked channel. On the Continent there is hardly a university without one or more professors of the specialty of nose and throat diseases, and there are well-appointed clinics—a marked contrast to the indifference and neglect which this branch meets in the United Kingdom. Among the latter-day results of bacteriology the new antitoxin for the prevention and cure of diphtheria deserves special mention. Specialism now enjoys, more than ever before, the respect of the thinking members of the profession and the public; but there is need for still further *rapprochement* between specialists and the general body of the profession in the interests of both. Each is necessary to the other, for no one can be an all-round specialist. All-sufficiency is as great a snare and delusion to those who profess it, and a positive dishonesty to their patients, as the alleged self-sufficiency of the specialist. The lecturer concluded thus: "Students of St. Mary's, whatever route you select for your voyage through life, your early stages as well as your final destination are identical. On this voyage you are now afloat. For many of you this day has the good ship been launched into the stream. At first you run with the current, with beacon lights to left and right, and with skilful pilots who know the shoals and sandbanks to counsel you. Choose well your crew. Make Principle your chief mate and Duty your boatswain. Place Wisdom at the helm, Hope ever at the prow. Soon will you all pass the harbour bar and be out on the flowing main. Then, with Honour as your pole-star and Conscience as your compass, may favouring breezes and flowing tides await you, and bear you to the islands of Good Fortune and Success; there may you find those pearls of great price—Esteem, Contentment, and Peace. May the sunshine of Happiness ever attend you, but be not downcast at lowering clouds or adverse gales; the clouds will lift, the winds will cease to blow. Times of storm and stress may come. Let not your heart fail you. With your trusty crew aboard you will weather the storm. The best ship may spring a leak and let the waters of Sloth into the hold; then pipe all hands to the pumps, and let Resolution mend the breach. Monsters of Avarice, Envy, and Jealousy may beset your course and try to wreck your craft; then keep on your course straight in the path of rectitude. Good mariners! the anchor's weighed—your sails are set. Speed on your course.

ST. THOMAS'S HOSPITAL.

INTRODUCTORY ADDRESS BY THE REV. W. W. MERRY, D.D.

THE prizes for the past year were distributed by the Rev. W. W. Merry, D.D., Rector of Lincoln College and Public Orator in the University of Oxford, who in a brilliant and witty speech gave some good advice to the students. One of the happiest hits in his speech was a humorous allusion to the geographical position of the hospital buildings. Here, he said, we have a real example of a building placed between Church and State (surely a typical site for a hospital). Dr. Merry alluded, of course, to the Houses of Parliament to the north and Lambeth Palace to the south. As common ground upon which he and his hearers might meet, he dilated upon some of the criticisms of Plato upon the medical and chirurgical art in the days of Homer. That philosopher praised the rough-and-ready treatment which the wounded heroes received before the walls of Troy and condemned the medical practice of his own day as a system of "coddling." In his ideal commonwealth Homer had no place for invalids, and the great physician was Work, who would either kill or cure. As Socrates said: "When citizens grow indolent and intemperate, then courts of law and hospitals are established, and the arts of the lawyer and physician give themselves airs, and new names are invented for the diseases of those careless livers who fill themselves with winds and waters like a marsh." The magic of sympathy must be the physician's motto. He had opportunities of access and openings for friendly counsel that ministers of religion might often look for in vain, opportunities which if properly taken advantage of would often save a life in more senses than one. The real sanctification of a medical man's work was sympathy for the sufferer and reverence for his troubles, mental and bodily. Dealing with the subject of examinations, Dr. Merry reminded his hearers that examinations were merely a test for the progress of education. Book work should have actuality given to it by observation and experiment. Half the nervousness known to examiners as the sure precursor of failure was due to the attempt to learn up a multitude of answers in the hope of utilising some percentage of them when before the examiner. The cultivation of some taste outside professional work, either in art or music, Dr. Merry thought would conduce to a flexibility of mind that would obviate such nervousness, and he reminded his hearers that a change of work often brings more refreshment than would be afforded by the same amount of rest. In these days of the well-puffed pill, the patent syrup, the expectations of rejuvenescence

at fourscore years and ten from the presence of a zinc-and-copper button concealed in a waistband, and when "the man in the street" talked glibly of bacilli and leucocytes, it was necessary for the medical man to keep in touch with the physiologist and chemist. At the same time he must remember that before all things he is the "doctor." If he neglected the humblest details of his practice he would discredit his profession. Concluding, Dr. Merry said: "We grow more and more exacting, and you are striving eagerly not to fall short of our requirements and our hopes. It is difficult to live up to such a standard, for as you seem to approach it it recedes before you, and some new light draws you still forward. But this is the very law of progress, the never-failing stimulus to the honest worker, who realises that there is no halting-place at which he may safely stop. Day after day adds abundantly to the stock of his experience—

> "'Yet all experience is an arch, wherethrough
> Gleams that untravelled world whose margin fades
> For ever and for ever as we move.'"

UNIVERSITY COLLEGE, LONDON.

INTRODUCTORY ADDRESS BY PROFESSOR H. R. SPENCER.

THE lecturer said that the usefulness of an introductory address had been questioned, and University College Hospital was one of the few medical schools which remained conservative in this respect. There were at least two sides to the question. Some thought the address served no useful purpose and should be discontinued. This view was held temporarily by the man who had to give it, who made up by the strength of his opinion for the paucity of his supporters. The idea that it was useful was held by those who had already given the address—that is, by the senior members of the hospital staff—which reminded one of the fox that had lost its tail and tried hard to get its companions to submit to a similar mutilation; but his colleagues had the advantage over the fox in the fable that they not only succeeded in making the young fox part with his *tale*, but in enrolling him among the numbers of those who would recommend the practice to his successor next year. He thought there must be a good deal in favour of a custom which, in the course of one short hour, never failed to convert an opponent into an advocate. An introductory address for the purpose for which it was formerly given was now quite obsolete; their teachers and text-books would give full instruction in the matters and methods of study. Perhaps it would have been more useful to their parents and at an earlier stage of their careers; he would advise parents to give their sons destined for the medical profession an education in which science and modern languages played a considerable part. He thought that the standard of the preliminary medical examination should be raised. The medical student, of all others, required a sound body and a cultivated mind, and if to these he added industry and high character he might be confident of success. To all his hearers he extended a hearty welcome, and congratulated them on entering the medical profession at the end of the nineteenth century, during which such great progress had been made in the sciences, and in none more than in medicine. Among other instances he alluded to the application of the antiseptic principle to the treatment of wounds, which had revolutionised surgery and obstetrics, and which he believed history would record as the grandest achievement of the century. For this the world was mainly indebted to the genius of one man, a former student of University College Hospital. In medicine, too, great advances had been made in diagnosis and treatment, as a result of the employment of the experimental method of research, which only the ignorant condemned. Perhaps medicine was a little neglected by the State; but the eloquent and generous tributes recently paid to the medical profession by Lord Salisbury and Mr. Gladstone showed that it was appreciated by the chief men of the State. There were some directions in which legislation was urgently required for the benefit of the public as well as of the profession. Necropsies in cases of unnatural or suspicious deaths should be performed only by expert medical jurists and pathologists. If coroners were always drawn from the ranks of medical men there would no longer be returned such verdicts as that given in the recent Blue-book on certification of death—"that the man died of stone in the kidney which he had swallowed when lying drunk on a gravel path." Practice by unqualified persons and by medical men whose names had been removed from the Register should be absolutely prohibited; and the law should be severe upon those unprincipled persons who risked the lives of the ignorant poor by circulating among them the cruel slander that patients were experimented upon in hospitals. He congratulated his hearers upon having joined University College Hospital, an institution which had always been in the front rank of medical education in this country. Its students had eight times in the last ten years taken the gold medal at the M.D. examination of the University of London, and the number of its pupils who had obtained appointments upon the staffs of other London medical schools was twice as large as that of any other institution. Adverting to the question of the abuse of hospitals by well-to-do patients, he thought hospitals should be able to recover fees from persons who obtained gratuitous treatment by fraudulently representing themselves to be poor. It was something to the credit of the medical profession that physicians and surgeons not only gave their services gratuitously to the hospitals—a matter concerning which there was much misunderstanding in the public mind—but also in the case of private patients who were poor, or represented themselves to be so, they often received no recompense beyond the gratitude of their patients. In giving advice concerning their studies, he recommended regular attendance upon the practical classes and upon the lectures, which had many advantages over text-books. They should assiduously cultivate the art as well as the science of medicine. They could not spend too much time in the out-patient department and the wards of the hospital. Nor could they examine too many cases, for there was not one from which something could not be learnt. Especially should they endeavour to obtain one of the resident posts at the hospital, which gave a training with which no other could compare. After they had obtained their qualification he thought it would repay them in increased health and knowledge of the world to take a voyage to one of our colonies as surgeon to a steamship. Many University College men had in doing so found excellent openings for practice, and had risen to positions of high influence. Their art was a long one, and they should not be in a hurry to settle in practice; and when they did so let the aim of each of them be to add to the dignity of his profession. No amount of advice could make up for the want of proper feeling on their own part. By lectures they might be made learned, but not honest, sympathetic, and kind, which qualities were essential to successful practice. The profession they had chosen was an arduous one, and yet it was the most fascinating of all. Their position in the world would depend upon themselves. No social class could look down upon those to whom such sacred interests as reputation and life were entrusted. Greater trust had no man than this, that he trusted his life to his friend. Might they all prove worthy of that trust, of their profession, and of their school.

WESTMINSTER HOSPITAL.

INTRODUCTORY ADDRESS BY MR. GUSTAVUS HARTRIDGE.

MR. HARTRIDGE began by claiming for the medical profession a more general utility than any other profession could show; while the high position held by so many medical men in letters and science demonstrated the profession as markedly cultivated. In this connexion he looked forward to the time when medical men would be fairly represented in both Houses of Parliament, with a medical Minister of Health sitting in the Cabinet. After congratulating the students on their choice of a school Mr. Hartridge continued: "It is my privilege in the post I occupy to-day to give you some advice. Allow me, first, to remind you that the object of all early education and training is to enable the student to acquire knowledge upon any subject with the greatest facility; and he is fortunate who has paid great attention to his early education, for he may have acquired that valuable faculty of reading properly; by reading properly I mean easily and to the greatest advantage. You will have already found out by experience that perseverance and industry will overcome most difficulties, and it may safely be asserted that any student with the instincts of a gentleman, fairly good abilities, and a firm determination may rise to the most coveted position in our profession. I cannot but think that much benefit would ensue by raising the standard of the entrance examinations. I should like to see Latin and Greek replaced by modern languages and scientific subjects, which would be equally effectual as a mental training and far more useful. A very interesting paper was read on this subject a short time ago at our Guthrie Society. This raising of the standard of

the preliminary examinations might have the effect of diminishing somewhat the numbers of those entering our profession, a disadvantage we could easily submit to. The immense amount of reading which will fall to your lot during the next five years—the names even of the subjects before you are appalling in their number—is carefully mapped out in the curriculum which is laid down for your guidance. Some of the subjects upon which you will have to enter are accompanied by duties which are not always pleasant; thus, anatomy must be learned by dissection of the human body, which is naturally at first more or less revolting to every student with nice feelings. Still, your interest in the work will soon overcome this dislike, for anatomy is full of interest and attractions. The value of its careful study lies not merely in its subsequent application to medicine and surgery, but also as a means of mental training, calling forth the powers of observation and memory. Then, later, surgery must be learnt, not only in the out-patient department and in the wards, but also in the operating theatre, often at first a most unpleasant task for the sensitive student. I would have advised you all to do some occasional reading on subjects outside the profession, had not the amount of medical reading which must necessarily fall to your lot during your time here been so large. I would caution you that there are two extremes to be avoided. Working too much is almost as bad as working too little. Perhaps it is even worse, because something may be done by great application and perseverance to make up for lost time; but a student who, through misguided zeal, has lavished his strength on his work to the neglect of his physical well-being may find out too late that his health and energies are consumed. Regulate, therefore, your working hours; but be careful to look after your general health; by spending a certain time each day in the open air, taking an intelligent interest in sports, such as cricket, tennis, boating, and football; but do not become entirely engrossed by these pastimes, as is the case with many of those at our public schools and universities, and which gives some point to the words of that German scholar who said that 'the English boy plays at his work and works at his play.' Remember always that medicine is a jealous mistress that will brook no rival."

From the newly joined students Mr. Hartridge turned to the more senior members of his audience. "To those of you," he said, "who have obtained their diplomas, and are about to give the world the advantage of their services, I would say, Be charitable to the members of your own profession, and do not be too ready to believe all you hear to the detriment of your professional brother who may live in the same town as yourself, that ancient medico whose diploma may be ten years older than your own. All gossip is contemptible, and when it concerns a member of your own profession it is base indeed. You may leave London with the confidence of knowing everything that is worth knowing, but you may soon find out how easy it is even for the best to make mistakes. You may, however, console yourself with the assurance that mistakes properly recognised are the surest way to knowledge; the danger is in those men whose self-confidence is only equalled by their ignorance, and who are unable to recognise their own mistakes. Do not pay too much attention to the flatteries of an ignorant public, who will readily shower upon you compliments when you least deserve them, and perhaps revile you when you really deserve great credit; you may find it your duty to tell a patient some unpalatable truth, which may call down upon you his inveterate dislike, and my advice to you is, Always have the moral courage to do what you consider right, and allow the consequences to take care of themselves. Be sceptical of those wonderful tales which you will hear of cures that have been effected by this person or by that, after many physicians and surgeons of high repute have failed. The public often have a special predilection for that gentleman who does not possess a diploma, and whose education may have been of the most elementary description, but in its place possesses, so they think, great intellectual development and originality which is not the birthright of ordinary mortals. Remember that no medical yarn is too improbable for the public to swallow; in fact, the more improbable it is the easier they seem to be able to digest it—hence the success of all the quacks and charlatans who advertise so freely in our Press. These advertisements are hardly a credit to journalism; they are usually of the most flagrant description, many of them without a vestige of truth, out of which the papers make a rich harvest, for they charge special rates for these insertions. The mere fact that it is worth while paying these very heavy rates proves that they are not inserted in vain; the so-called religious papers, which might be supposed to be published in the interests of truth, are the worst offenders. I hope the day may not be far distant when every respectable paper will be able to follow the lead of the *Times* and refuse all such advertisements."

Mr. Hartridge concluded by referring in the following words to the position occupied by ophthalmology: "The relation of ophthalmology to general medicine and surgery is of the most intimate kind: many general diseases, such as diabetes, albuminuria, affections of the brain and spinal cord, may first be detected by means of the ophthalmoscope. Much of our knowledge of inflammation has been obtained by watching the various processes in the different structures of the eye, supplemented by experiments. The contributions which ophthalmology has made to medicine and surgery are universally admitted, but it has also contributed much in the treatment of disease. I would recommend you all to pay some attention to this important speciality, for not only is the knowledge thus acquired of the greatest value, but in no other branch of your work is the training better; the accuracy of every detail which can be watched in a transparent organ like the eye can be noted down exactly, leaving but little to the imagination. Should you go into general practice without some knowledge of ophthalmology you may have great cause to regret it, for you may at any time come across a case in which the eyesight of your patient is at stake, and in which immediate treatment is imperative. To those about to receive these prizes I would say, May your present success stimulate you to further efforts; to those who have been less fortunate I would say, Do not be discouraged, the winner of the first trick does not necessarily win the rubber; continue to persevere with your work, and you may eventually find yourself in front of some that may have beaten you to-day; remember that the race is one of a lifetime, in which often the best stayer is the most successful. In conclusion, I would express the hope that you may find pleasure and comfort in your profession, that success and plenty of work may attend you, and that on a future occasion some of you may find yourselves sitting in these seats. Now is your opportunity for laying the foundation of a career which shall earn for you an honoured name and add lustre to your old medical school—the Westminster Hospital."

SHEFFIELD MEDICAL SCHOOL.

INTRODUCTORY ADDRESS BY DR. J. W. MARTIN.

THE winter session of the Sheffield Medical School was opened on Oct. 1st by an introductory address from Dr. Martin, Joint Lecturer on Midwifery and Honorary Medical Officer to the Jessop Hospital for Women. In his opening remarks he alluded to the loss the profession had sustained in the death of Sir Andrew Clark and gratefully recognised his services to the school in visiting Sheffield to plead its cause for support when an effort was being made to raise the money for the erection of the present school buildings. A tribute was also paid to those who had preceded him in performing the duty of delivering the introductory address, special mention being made of Sir J. Crichton Browne and others. Having warned the students of the importance of the choice they were making of a life's work, and having expressed the hope that they were devoting themselves to the profession in a proper spirit, he welcomed them on behalf of his colleagues and himself. The lecturer next dealt largely with the practical side of a student's education as carried out in the dissecting room, the laboratories, and at the bedside. The necessity for the cultivation of careful and accurate observation was strongly urged, and allusion was made to the power the older physicians had of reading aright the outward signs of disease which enabled them to form very accurate diagnoses in the absence of the many instruments of precision which are at the disposal of medical men of the present day. The necessity for a proper amount of relaxation in the life of the student was touched upon, but the lecturer urged that it should be kept within proper limits, and that indulgence in games and other pleasurable pursuits must always be subordinated to the real work of a student's life. Avoidance of habits opposed to steady work was strongly urged. The temptations of student life were pointed out, and moderation in all things was recommended. In addressing himself to the advanced students whose

course was drawing to a close, the lecturer insisted strongly that they should study the ethics of the profession, as ignorance of its canons was only too frequently the source of annoyance and irritation, especially to those who were commencing practice. In this connexion he laid stress upon the observance of the good old rule, "As ye would that men should do unto you, do ye also to them likewise." He maintained that the more broadly and generously this rule was interpreted the happier would be the lives of those whose dealings with others were guided by it. The lecturer strongly condemned the practices of those who descended to methods of making an income which, though they might be lucrative to the individual, were disgraceful to the profession at large. He expressed the hope that such practices might soon come within the scope of the General Medical Council, and that they should be put down with a strong hand. He strongly condemned those medical aid insurance societies which tempted young medical men to allow themselves to be farmed out for the profit of their employers, though in doing so they were giving their services to those who were quite in a position to pay a proper fee for medical services, and were thus degrading themselves and striking a very serious blow at the welfare of the profession at large. Dr. Martin, in concluding his address, pointed out that it was not given to everyone to attain eminence as world-known physicians or brilliant operators, but held that those who were engaged in the humbler sphere of general practice were, in their efforts to relieve suffering, doing quite as much good as those who won fame and fortune by the performance of some brilliant major operation; such men could look back in after-years with satisfaction to the good work they had done.

ROYAL VETERINARY COLLEGE.

INTRODUCTORY ADDRESS BY PROFESSOR MCFADYEAN.

THE lecturer said that the session which they had met to inaugurate that day marked an important step in the evolution of veterinary education in this country. Veterinary students had now to furnish evidence of having received a general education equivalent to that required for the study of law or medicine, and they had to undergo a professional training extending over a period of four years. That could not fail to enhance the social and scientific status of British veterinary surgeons, and it would warrant them in claiming that they belonged to one of the learned professions. Proceeding to deal with the suppression of contagious diseases of the domesticated animals, which he had selected as the main subject of his address, the lecturer said that the system of "stamping out," which had already proved so successful in the case of cattle plague, pleuro-pneumonia, and foot-and-mouth disease, had been characterised as barbarous and unscientific. At the present time some people seemed to think that in the future there would be a great development and extension of protective inoculation as a means of dealing with animal plagues. That would, for a time at least, be a great source of gain to veterinary surgeons, but it would just as certainly be a great source of loss to stock owners. The stamping-out policy was now being put into force against swine fevers, and that, it was to be feared, would tie the hands of the Board of Agriculture for some time to come. Meanwhile, it was worth considering whether any of the other contagious diseases of farm animals could be successfully attacked by veterinary surgeons without the organised direction of the central authority. He thought that this could be done in the case of two diseases that were at the present time the cause of immense loss. The first of these was glanders. A few years ago it seemed as if glanders could not be successfully dealt with by any other method than wholesale slaughter of infected studs, with compensation from Imperial funds; but the discovery of mallein had given an entirely new complexion to the question. As a means of diagnosis the use of mallein was so marvellously accurate that a veterinary surgeon could now within twenty-four hours point out to any horse-owner every glandered animal in his stud; glanders could, therefore, now be stamped out without destroying a single horse beyond those actually infected. This information had been before the reading members of the veterinary profession for nearly two years, and yet, except in a few isolated instances, full advantage of the new discovery had not been taken in dealing with outbreaks. No compulsion ought to be necessary; but if horse-owners did not soon make a more serious effort to free their stables from glanders the law would have to be altered. The law as at present administered was certainly defective, for horses that had been exposed to the contagion of glanders were sold openly in London almost every day. This scandal ought to be put a stop to by giving the purchaser of any horse found (by the mallein test) to be glandered within a few days of the sale the right to recover the price paid. Tuberculosis was another disease against which stamping-out measures might now be hopefully employed. As a first step they ought to diffuse among agriculturists correct notions regarding the causation of the disease. It was still almost generally held that tuberculosis of cattle was frequently congenital, but there was overwhelming evidence to prove that that opinion was erroneous. Even when one of the parents was tuberculous not one calf in a thousand was born tuberculous. In cattle under a year old the proportion of tuberculous individuals was less than 1 per cent., but it rose steadily with age, until in adult cows it was seldom less than 20 per cent. and frequently 40 or 50 per cent. Every known fact regarding the incidence of the disease as regards age, breed, and locality was in complete accord with the view that bovine tuberculosis was a disease that spread with great certainty when diseased and healthy animals were housed together, but had only feebly contagious properties among cattle kept in the open air. The discovery of tuberculin had put in their hands the weapon that was needed to wage war with tuberculosis of cattle, and veterinary surgeons should lose no opportunity to urge its employment upon those who had the disease in their herds. By this means anyone might free his stock from tuberculosis at a cost that would be small compared with the steady loss entailed by the present neglect of every reasonable precaution against the spread of the disease. The eradication of animal tuberculosis would be a great national gain, and although it probably would not sensibly lessen the prevalence of phthisis in man it would have a powerful effect in convincing the public that contagion is the main factor in the dissemination of phthisis.

NOTE ON THE AUSCULTATION OF THE SECOND SOUNDS OF THE HEART.

BY WM. EWART, M.D. CANTAB., F.R.C.P. LOND.,

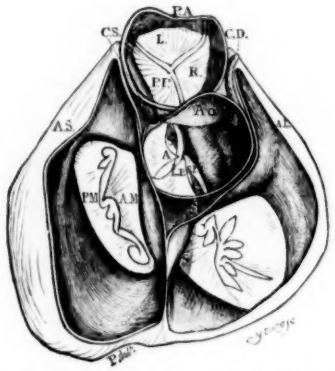
PHYSICIAN TO ST. GEORGE'S HOSPITAL AND TO THE BELGRAVE HOSPITAL FOR CHILDREN; EXAMINER IN MEDICINE AT THE CONJOINT BOARD.

THE important paper published in the last issue of THE LANCET by Dr. Sydney Ringer and Dr. Arthur G. Phear on the clinical significance of accentuated second sound ends with a conclusion which to all clinical workers cannot fail to be discouraging. To this conclusion they seem to have been led by perhaps too keen and gloomy a sense of a real difficulty, that of differentiating and of separately tracing the two second sounds. In so far as any definite progress made in that direction would help to restore our confidence in indications which we had once trusted, and might extend their usefulness, every instalment of facts, whether anatomical or physiological, tending to cast fresh light upon the question of the two sounds, may be regarded as of direct service to clinical practice. Several of the points raised by the joint authors were considered in my lecture on the "Heart Sounds and on Accuracy in Cardiac Auscultation," published in THE LANCET of May 27th, 1893. Long before its publication I had satisfied myself that the right side of the heart does not conduct the pulmonary second sound, and that the area of audible conduction for this sound is limited and localised, whilst the aortic second sound is heard far and wide over the cardiac region and beyond it. Subsequent observations have confirmed me in the same views. The singularly limited area of loudness of the pulmonary second sound needs no better demonstration than is given by cases where the aortic valve is silenced by disease; the pulmonary sound, though it may be a loud one in its own district, is then not, or only faintly, audible beyond the latter. And conversely, when the pulmonary sound at the left second interspace happens to be feeble (in the absence of abnormal inflation of the lung), a loud second sound occurring at various other parts of the præcordium must be identified as of aortic origin, and is a sufficient proof that the aortic sound is capable of extensive diffusion. So great a disparity between the two sounds in respect of conduction must have

some definite cause, perhaps not altogether beyond elucidation. At any rate, it is in itself sufficiently important to justify any inquiry into its mechanism. Without reiterating previous statements (cf. loc. cit.), the following considerations, based upon the examination of many hearts in the fresh state and after preparation, may be provisionally offered as an endeavour to dispel the doubt to which reference has been made.

1. Systole, which brings the pulmonary valve into touch with the chest wall, does not materially alter the relation of the aorta to the latter. 2. Since from this point of contact the pulmonary artery recedes upwards into the depth of the chest, its blood pressure bearing upon the valve would strike with obliquely sagittal direction against the chest wall, which, indeed, is sometimes seen to quiver under the shock. The axis of the aorta at its origin is very

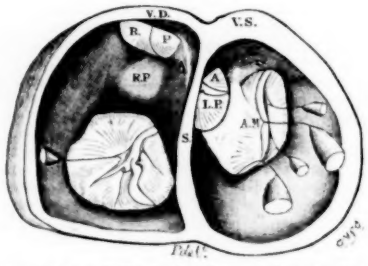
FIG. 1.



The heart valves viewed from above:—P.A., AO.: The pulmonary artery and aorta divided above the valves. L., R., P.P.: Left anterior, right anterior, and posterior pulmonary flaps. A., L.P., R.P.: Anterior, left posterior, and right posterior aortic flaps. A.S., A.D.: Left and right auricular appendices in section. P.M., A.M.: Posterior and anterior mitral flaps, from above. S.: The ventricular septum, showing through the tricuspid membrane and seen below the aortic valve-flaps.

different from this, as may be seen in Fig. 1; forming during systole almost a straight line with the ventricular septum. 3. Attention should also be drawn to the anterior position of two of the pulmonary flaps as greatly favouring direct transmission of the valvular sound to the chest wall. 4. The same figure illustrates the relatively high position above the ventricular level occupied by the pulmonary valve. The valve is isolated at the extremity of the conus arteriosus

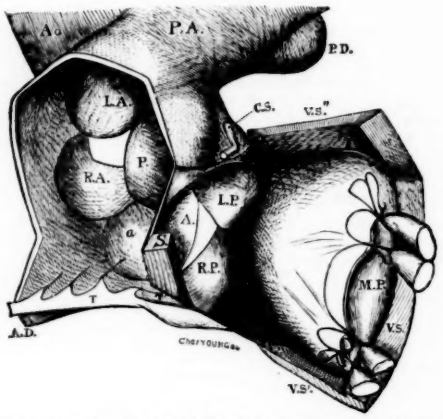
FIG. 2.



Same preparation as in Fig. 1, viewed from below. S., V.D., V.S.: Ventricular septum; right and left ventricular walls in section. A: Anterior aortic sinus, bulging into conus arteriosus. R.P.: Right posterior aortic sinus, bulging into base of right ventricle. The remaining letters as in Fig. 1.

from the main body of the right ventricle. Again, its relation to the ventricular septum, or rather to the upward prolongation of the latter, is not vertical, but lateral only. Lastly, it is isolated from the massive portion of the ventricular septum, upon which rests the aorta, by the entire diameter of that vessel. 5. Although in contact with the tip of both auricular appendices, the pulmonary artery is not in contact with the right auricle, which is therefore unable to conduct its sound vibrations. Thus the anatomical relations would not facilitate a conduction of the pulmonary sound either along the septum and left ventricle, or towards the right auricle, or even into the right ventricle. In all these points the aortic sound is, on the contrary, greatly favoured. 6. The aortic valve is firmly planted at the top of the broadest part of the septum, which may be regarded as a first-rate conductor. 7. Its sinuses of Valsalva are so distributed as to propagate the aortic sound to the entire surface of the heart. One of them (R.P., Fig. 2 and Fig. 4; T.', Fig. 3) forms part of the superior boundary of the right ventricle, which thus receives at a central point direct transmission of the valve sound. Another (*a*, Fig. 3) projects into the conus arteriosus below the adjoining pulmonary flaps, cutting off, as it were, their line of communication downwards into the right ventricle. The third (L.P. in all figures) bulges into the right auricle (as does also R.P.) and into the left auricle. Moreover, the aorta above the valve is tightly wedged, as shown in Fig. 1, between the four cavities of the heart, to which it must communicate its vibrations.

FIG. 3.

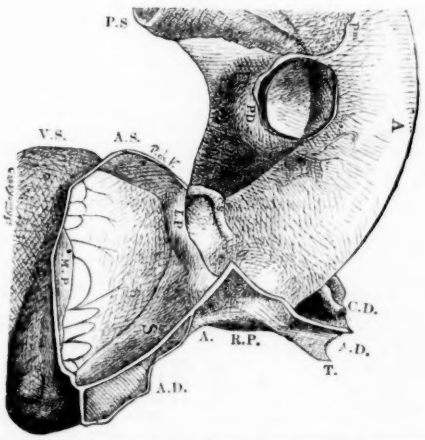


Sketch of the heart valves isolated from surrounding tissues viewed from the left ventricle, i.e., from below and behind, showing the relations of the aortic valve to the pulmonary valve, to the conus arteriosus, and to the ventricles. AO., C.S.: Aorta (cut away behind the pulmonary valve). P.A., P.D.: Pulmonary artery and its right branch. S.: Small piece of the septum upon which rests the aortic sigmoid flap A. V.S.: Section through the left wall of the left ventricle, and through the musculi papillares attached to the anterior mitral flap and to the posterior mitral flap (M.P.). V.S.', V.S.'': Sections through the posterior and through the anterior wall of the left ventricle. A.D.: Small piece of the right auricle and of the corresponding flap of the tricuspid, the latter reflected upwards towards the conus arteriosus, and continued (below T.') into the membrane of the so-called undefended space, which is cut across, and into the anterior mitral flap. P., L.A., R.A.: Posterior, and right and left anterior pulmonary flaps, and corresponding sinuses. A.: Anterior aortic flap, its sinus (*a*) projecting into the conus arteriosus. R.P.: Right posterior aortic flap, and its sinus (T.') projecting into the base of the right ventricle and into the right auricle. L.P.: Left posterior aortic flap and its sinus projecting into the auricles.

8 It should not be forgotten that, in the healthy state, at the moment of production of the second sound, the ventricular walls of the heart are gathered into a firm mass tightly applied to the septum, and with it constitute a solid pleximeter upon which the valvular succussion plays the part of a hammer. The excellent conduction of the aortic second sound to the apex of the heart is thus very clearly explained, and it is equally plain that conduction must also take place to the entire surface of the contracted ventricular cone. 9 Moreover, at the same moment the auricles are gorged with blood, and the thinness of their wall enables their contents to receive the more fully the vibrations and to transmit them by fluid conduction. This, again, tells in favour of the aortic second sound, which is in this way propagated to the lower portion of the sternum and to the right lower parasternal area. 10. Lastly, in cases where the right ventricle fails to discharge its contents completely, the aortic second sound would be conveyed to the ventricular blood and through it to the right ventricular walls from the aortic sinus of Valsalva

which has been described as forming part of the upper boundary of the right ventricle; and the same reasoning would apply to inefficient systole of the left ventricle. On anatomical grounds it may therefore be said that the aortic second sound commands three cavities (the pulmonary artery through its right branch influencing only the left auricle) in addition to holding the high road for vibrations along the septum, and to practically excluding the pulmonary sound

FIG. 4.[1]



Same preparation as in Fig. 3, viewed from behind, from above, and from the right. A.: The aorta. P. D.: Section through the right branch of the pulmonary artery. S.: The auricular septum. A. D.: The right auricle. A. S.: The left auricle and the upper surface of the anterior mitral flap. M. P.: The posterior mitral flap. T.: The upper extremity of the upper tricuspid flap, continuous with the membrane (*a*) of the so-called undefended space. V. S.: The left ventricle, separated from the left auricle by the auriculo-ventricular groove. The other letters as in Fig. 3.

from propagation into the right ventricle. For the pulmonary sound there remain only loud and direct conduction to the anterior chest-wall immediately covering the valve, as well as to a limited adjacent district, and inaudible conduction into the depth of the chest along the pulmonary artery and its branches.

DIPHTHERIA TREATED BY ANTITOXIN.

BY HUNTER URQUHART WALKER, L.R.C.P. & S. EDIN.,
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THE present seems to me to be a favourable time to publish in the columns of THE LANCET a few remarks that I consider appropriate on the above subject, more especially as so much has been written in THE LANCET lately showing that cases of diphtheria are on the increase. Your readers doubtless have studied with interest the reports of cases of diphtheria which have been treated in Guy's Hospital by Dr. Goodhart by means of antitoxin. I do not know that cases in private practice so treated have been mentioned in any journal. I was so struck with the results produced, or apparently produced, by this drug that I determined to investigate the matter, and when I had a chance put antitoxin to the test. So I procured from Messrs. Zimmerman and Co. a small quantity of Behring's solutions. It is impossible, I know by sad experience, for the hard-worked general practitioner to be thoroughly versed in the great army of new drugs that we have in the market, and I may therefore be pardoned if I state here for the benefit of my readers one or two facts with regard to the drug in question. Antitoxin, I think, deserves special consideration from us, and I shall have attained my object if others will state in THE LANCET their experience of the drug, and say whether it does or does not bear out what has been said of the new specific. With regard to Behring's solution, it has been proved that if a mixture of 0·001 c.c. with the same amount of poison is subcutaneously administered to guinea-pigs, not only are no symptoms of disease caused, but also no local symptoms are observable, especially no infiltration at the place of injection. The antitoxin solution contains 2 to 2·5 per cent. egg albumen and a further admixture of 0·4 per cent. trikresol for preservation purposes. For the immunisation of adults and elder children 1 c.c. of the solution is injected subcutaneously by means of a Pravaz syringe, which has been previously sterilised by alcohol and three per cent. carbolic acid or one per cent. trikresol solution. For young children up to two years the dose should be 0·55 c.c. The above quantity of antitoxin thus administered to persons threatened by diphtheria is at least ten times as much as is required to render them immune. The immunity from diphtheria is therefore much more lasting. Before stating the particulars of the case in which I tried antitoxin I should like here to tender my best thanks to my partner, Dr. Crawford, to Dr. Hope, medical officer of Liverpool, and to Dr. Davidson, the hon. physician to the Liverpool Infirmary for Children, who kindly saw the case with me and interested themselves in the treatment of it.

I was called in to see the patient, eight years of age, on July 27th. I was told she had been ill for a day or two. She had passed a very restless night. On the 28th the child seemed more restless, the colour in the face was rather darker in hue, the pulse quicker and the breathing more difficult. The throat presented much the same appearance as on the previous day. On the 29th the child was distinctly worse, especially the breathing. The fauces on the right and left side were covered with membrane. In the evening the respiration was very quick. On the 30th the membrane was well formed, even extending well over the soft palate and hanging down into the mouth. Up to this time the child had been treated with iron and chlorate of potash internally, and the constant use of the lime-water spray. (One patient under my care just previously—a very bad one—did so remarkably well with the lime-water spray that I naturally did not wish to discard this method of treatment in favour of another of which I had little or no experience.) However, it was evident that something more would require to be done if the patient was to improve, for I noticed that in spite of the treatment another patch of membrane had formed in front of the curtain which hung down from the soft palate. I resorted to antitoxin. Eleven minims of antitoxin were then injected into the forearm with strict antiseptic precautions. The temperature at the time of injection was 103° F., and the pulse 140. In four hours after the injection the child was much improved. There was no fever and the pulse was quite quiet. She had a good night and had to be roused by the nurse to receive her nourishment, which throughout consisted of beef tea, chicken soup, brandy and milk, and wine whey. On the 31st I noticed that the same improvement continued, although the membrane was still present. However, it was apparently loosening at the right side. My patient informed me that her temperature was 98·4° F., and I found she was nearly correct, as it was normal. During the day much of the membrane came away. The last patch to form had disappeared. All that was to be seen was on the uvula and on the left side. On Aug. 1st all signs of membrane had disappeared; the temperature was normal and the pulse good. The patient begged to be allowed to have her picture-books in bed. The throat caused her no pain. From that date uninterrupted recovery took place.

I would especially notice in this case that within a few hours the temperature was reduced four degrees and afterwards remained normal. The constitutional disturbance was at once checked, although the membrane still remained on the uvula and left side of the throat. The new patch on the soft palate at once disappeared, and the appearance generally became more normal. The injection in this case, as in other cases where it has been used, was entirely innocuous, being followed by neither local nor general disturbance.

Worksop, Notts.

[1] All figures kindly sketched by Mr. P. de Vaumas. Fig. 1 and Fig. 2 reproduced from "Cardiac Outlines," Baillière, Tindall, and Cox, 1892.

THE inaugural address of the Abernethian Society of St. Bartholomew's Hospital will be delivered by Sir James Paget on Thursday next, Oct. 11th, at 8 P.M., at the hospital. Sir James Paget's address is entitled "Scientific Study in the Practice of Medicine and Surgery," and the newly joined students at St. Bartholomew's Hospital are especially invited to attend.

THE ACTION OF METHYLENE BLUE ON LÖFFLER'S BACILLI, WITH CLINICAL SUGGESTIONS.

BY BERTRAM HUNT, M.B. OXON., M.R.C.S. ENG.

(*Concluded from page 736.*)

WHILE the part played by streptococci in diphtheria will be dealt with in another paper, it must be mentioned here that as some substances, like carbolic acid, for instance, slow the reduction, so also, unfortunately, do agents favouring the virulence of the bacillus. For if either streptococci or their products be added, a retardation of reduction amounting to about one-third takes place, living streptococci having more effect than filtered cultures. As the addition of acids or alkalies was also found to retard it, an adjustment of reaction was made and the minimum time of reduction determined, the error due to any change in reaction being in this way avoided. The idea that the blue acted merely as a carrier of oxygen and that its antiseptic powers depended solely upon this quality, suggested that another subtance present in the living animal—namely, hæmoglobin—ought to give similar results. To avoid as far as possible any attenuation by the blood as a whole, freshly clotted rabbit's blood was rubbed up with sterile sand in a mortar, a mixture of bouillon and 6 per cent. salt solution added, and the mixture filtered. The filtrate formed a bright-red solution. To 2 c.cm. of this 0·5 c.cm. of a bouillon culture was added, and as a control 0·5 c.cm. of the same culture was added to 2 c.cm. of the bouillon salt solution, which had been also rubbed up with sand and filtered. Both tubes were shaken repeatedly, and after four hours four guinea-pigs were injected, two receiving 1·0 c.cm. from the hæmoglobin tube and two 0·8 c.cm. from the control. Both the controls died within thirty-six hours, while the experiment animals lived forty-eight and fifty-five hours respectively. This experiment was repeated with some oxyhæmoglobin (Grüber), and this showed a stronger attenuating action. The experiment animal lived six and a-half days, while the control died in thirty-two hours. A copious growth in bouillon containing some of the substance showed that the result was not due to any chance admixture of antiseptics. An investigation of this action of hæmoglobin is needed in diseases due to bacteria, which do not seem to find in blood a favouring medium for development. On the other hand, no one could contend that anthrax bacilli are attenuated by it, and it is worthy of note that Hirschfeld, already quoted, did not find the virulence of these bacilli to be diminished by methylene blue, even in a strength of 1 in 700; whereas, as I have shown, anthrax also reduces the blue. A distinction must, however, be drawn between the action of a solution of hæmoglobin and the possible action of red blood cells. Although Roux and Yersin, however, succeeded in killing rabbits by injecting diphtheria bacilli into their veins, there is a great difference probably in the effects resulting on the one hand from the entrance of the bacilli one by one into the blood stream, as presumably occurs in disease, and the injection of cultures. For Löffler's bacilli always clump together, and a small adherent group of bacilli blocking a capillary would soon be shut off from oxygen. At any rate, this action of hæmoglobin and sunlight affords a strong support to my contention. There remain also one or two confirmatory points which reveal themselves in the consideration of the antiseptic properties of the blue. A series of bouillon tubes containing the blue in proportions rising from 1 in 600,000 to 1 in 120,000 show, after inoculation with the bacillus, a regular decrease of growth; those containing 1 in 100,000 remain sterile, but if a large number of the bacilli be introduced, they sink to the bottom of the tube, and, presumably starting a reduction, contrive to grow. Such bouillon may, however, be injected after three days' growth without causing fatal results in the animals. On the other hand, a plate of agar-agar containing 1 in 150,000 of the blue, and rubbed over its surface with several droplets of bouillon culture, remains sterile, no reduction of the blue being possible on the surface. Although 1 to 100,000 prevents the development of the Löffler, 1 to 70,000 is necessary in the case of the streptococcus, and not only is it remarkable that this delicate micro-organism, possessing no means of defence against the blue, should appear to be less sensitive to its influence than the bacillus which can reduce it to its harmless leuco product, but it also confirms the opinion that the reduction is in itself injurious. These streptococci also seem able to render the blue less antiseptic to the bacillus, possibly by slowing the oxidation, for I have twice succeeded in growing it in the presence of the former in 1 to 80,000 of the blue. These bacilli were not found virulent, however. It has already been mentioned that the reduction is not brought about by the products of the bacillus, and it is scarcely necessary to add that the blue is not found to lessen the toxicity of a filtered culture. Bouillon, however, containing 1 to 100,000 methylene blue, in which the bacilli have grown for ten days, can be injected in doses of 1·5 c.cm. without killing a guinea-pig.

Where the blue is added to forty-eight hours' cultures and permanent reduction allowed the toxine produced in the presence of the leuco product, while attaining no increase, is not found to undergo any mitigation of its virulent quality.

Of the other bacilli mentioned, the staphylococcus (pyogenes aureus) is found to have a susceptibility to the blue similar to that of the Löffler bacillus. It reduces the blue more slowly, but is also stained and killed by the shallow layer. The various sarcinæ, which from their constant presence in the air and their aerobic nature, might be expected to reduce the blue quicker than pathogenic bacilli, are much slower in effecting it, the time taken being about twenty minutes. In other words, if this oxygen were favourable to the growth of bacteria sarcinæ should reduce the blue at least as quickly as the Löffler bacillus.

Turning now to the practical application of this reduction process, a few words must be said as to its uses in bacteriology. The first place must be given to it as an indicator in testing the germicidal power of disinfectants. As a test, however, of conditions favourable or harmful to the growth or activity of bacteria, it is perplexing in that, as has been shown, while sunlight quickens it at first, both carbolic acid and streptococci slow it. Experiments on animals would, therefore, be always necessary to determine whether such slowing meant increase or loss of strength. Before discussing the possible therapeutic value of the reaction, it is necessary to recall the fact that toluidine blue was found to act similarly to the methylene blue; but whereas the latter may be considered as in the European extra Pharmacopœia, the physiological action even of the former is unknown. I find, however, that it is not poisonous when injected into guinea-pigs in doses of 0·030 gr. per kilo. The injection of methylene blue into animals was first performed by Ehrlich[1] and Dreser[2] in their researches on the oxygen-absorption power of the various tissues and organs; and while Dreser confined his experiments to a study of the kidneys, Ehrlich applied himself to the question generally. The latter first used alizarine blue and indophenol, but as a soluble stain methylene blue was found by both to be most suitable, and Dreser boldly calls it artificial hæmoglobin. Ehrlich found that it came midway between the two other colours, less easily reducible than indophenol, more easily than alizarine blue. The observation in these experiments that the blue was rapidly absorbed, and while reduced by various structures and by the epithelium of the kidney, was passed unreduced by the glomeruli, led to its employment by Netschajeff[3] in cases of nephritis presumably due to bacteria, and by Max Einhorn[4] in cystitis and pyelitis with apparently good results. Possibly, therefore, since the kidneys are credited with the function of excreting bacteria, the administration of it might aid them in a work in which they often suffer, and is perhaps worthy of trial in such diseases as are accompanied by a nephritis due to micro-organisms. Netschajeff warmly praises it in such cases. The blue has also been given in a case of Bright's disease with retinitis by Gillet de Grandmont.[5] These references are made especially to show that the blue may be given where nephritis is present—at least, without fear of deleterious action. It has, moreover, never been found to start an albuminuria. It also has an analgesic action. Ehrlich, observing that the blue was reduced in the axis cylinders of living nerves, came to the conclusion that an analgesic effect might be looked for, and, working with

[1] Sauerstoff-Bedürfniss des Organismus. Eine farben-analytische Studie. Berlin, 1885.—Zur biologischen Verwertung des Methylenblau. Centralbl. f. d. Med. Wissenschaft, 1885, p. 113.

[2] Histo-chemisches zur Nierenphysiologie. Zeitschrift für Biologie, 1885, iii., 41.

[3] Deutsche Med. Woch., 1893, 470.

[4] Ueber Anwendung des Methylenblau bei Cystitis Pyelitis und Carcinom. Deutsche Med. Woch., 1891, 620.

[5] THE LANCET, March 5th, 1892.

Leppmann,[6] found that in certain forms of rheumatism and neuralgia the pain was relieved by its administration.

These results have been confirmed by Immerwahr,[7] Piotrowski,[8] and others. Then in 1891 Ehrlich and Guttmann[9] introduced it as a new remedy in malaria, and its claims as a valuable therapeutic agent in this disease have received a very large support from the testimony of Boinet and Trintignan,[10] Kasem Beckh,[11] Thayer,[12] Karl Keth,[13] Neumann,[14] Paseuski and Blatters,[15] and others. The only facts to which attention need be drawn here are that it is non-poisonous, that doses of from 0·050 to 1·0 and even to 3·0 gr. may be given to adults daily, and that no mishap seems to have ever attended its administration. The only unpleasant symptoms which have been noticed are strangury and nausea, and these are found to be promptly relieved by a little powdered nutmeg. These untoward effects, however, appear to be due to the use of an impure drug, which is apt to contain a salt of zinc. The blue has also been used and its virtues extolled in many other diseases by D'Aulnay,[16] and Boinet and Trintignan,[17] and in beriberi by Thur.[18] The physiological action of the blue has also received attention, and while it has been shown to be practically non-poisonous in reasonable doses, it is only right to mention that Combemale[19] has found large doses to cause death in dogs with the formation in their blood of met-hæmoglobin, and he attributes its analgesic properties to this fact. Although it seemed best to show that methylene blue was, as an internal remedy, perfectly harmless, it is only as a local application that I venture to recommend it in diphtheria. For unless the blue be injected into the place of inoculation—i.e., where the culture was injected—it has no influence on the course of the disease. Even injections into the place of inoculation of 1 per cent. solutions in doses of 1 c.cm. cannot be depended upon to do more than prolong the life of the animals for from three to six days, if four to six hours be allowed to elapse between inoculation and treatment, although a certain number of the animals recover. The rapid absorption of the blue and its partial reduction in the tissues removes it from the neighbourhood of the bacilli before it has time to exert any influence upon them. Moreover, the animals received each only one injection of the blue—i.e., the treatment was not continuous. On the other hand, such injections, even sixteen hours after inoculation, prolonged life by twenty-four hours, and if injected simultaneously, or very shortly after the culture, comparatively weak solutions succeed in either killing or attenuating the bacillus. A consideration of the following results will make this plainer. If a bouillon culture containing 1 in 2500 of the blue be injected immediately after the blue is added, the animal dies within thirty hours, whereas if initial reduction is allowed life lasts forty-eight to fifty-six hours, and it follows, therefore, that in the 1 to 2500 solution the blue after injection must be rapidly absorbed. When the blue is added in the proportion of 1 to 1500, immediate injection of such bouillon only causes a slight illness, with recovery in about seven days.

If, however, the pocket method of inoculation be employed, the results are encouraging. For if such pockets be opened after sixteen to twenty-four hours and painted with a 1 per cent. solution of the blue, the inflammation rapidly disappears and no illness results, the blue exposed to the air remains blue and active. It is, however, only fair to state that strong carbolic acid solutions have a similar effect. The blue also affords excellent results in the treatment of experimental diphtheritic conjunctivitis, subduing the inflammation and healing the eye in forty-eight hours, the usual duration of the trouble being about one week. The application of the blue to the conjunctiva appeared also to diminish the soreness, for the animals opened their eyes wider after the painting, and a local analgesic effect was also remarked when injecting the diphtheritic guinea pigs. Its favourable influence was especially noticeable in one of the eye cases where to avoid the rapid reduction of the blue beneath the eyelid a crystal was introduced. Upon examination of the eye after twenty-four hours the blue colour was found to have disappeared under the lid, excepting in the spot where the crystal had lain. This portion of the conjunctiva was still feebly blue, and not only blue but with the normal white colour shining through, the congestion having entirely disappeared in the blue spot.

Before pointing out the advantages of the blue as a local remedy in diphtheria, it is necessary to state that it has already been used in that disease and with great success. Perhaps the success is too great. When I made my experiments I was unaware of this fact, and must point out that in the two trials of it, of which I find record, the blue was used empirically, without any knowledge of its manner of action. Dr. Beher[20] records in a brief letter the treatment of fifty cases, all of which recovered. He used it with sugar as a local application, but the disadvantages of this mixture will be apparent. A successful treatment of fourteen cases is also to be found in a publication by Kasem Beckh,[21] who used a 10 per cent. solution three times a day, holding wool steeped in the dye against the membrane until a dark staining of it was obtained. Three of his cases suffered from slight subsequent paralysis. Is it necessary or advisable to recommend a new remedy at the moment when the Heilserum treatment is receiving so much attention? A short consideration of the results of such treatment at present published show, I think, that local applications are not at present to be despised, especially in laryngeal cases. The following table gives these results shortly:—

TABLE IV.

Communicated by	Total cases treated.	Recovery per cent.	Tracheotomy cases.	Recovery per cent.
Kossel[22]	233	77	72	57
Weilgen[23] ...	65	72	16	44

Now the great advantage of the blue lies in the fact that it can be sprayed into the larynx without risk either of poisoning the patient or of causing irritation; and, further, it is calculated not only to diminish inflammation, but also to increase the resistant power of the cells. Ehrlich[24] found that, though methylene blue was reduced by only a few tissues during life, it was reduced with extraordinary rapidity post mortem by all; and in his experiments with indophenol he observed that the heart during life was blue, but that if respiration was stopped the colour disappeared, to reappear again as soon as air was allowed to enter the lungs. Now this experiment shows that the heart muscle can not only reduce the blue post mortem, but also in the absence of oxyhæmoglobin during life, and it proves that the hæmoglobin oxidises the indophenol. It might even be advanced that indophenol and methylene blue might serve as intermediaries between the cells and the hæmoglobin; that the hæmoglobin might act as the Fehling solution did in my sugar experiment. Whatever the explanation may be, it is at any rate allowable to hold the opinion that methylene blue can act as a substitute for hæmoglobin. In the case of inflamed wounds and unhealthy sores the congestion must prevent any adequate supply of oxygen from reaching the more superficial parts, and the tissues and cells are in this way enfeebled. The local application of methylene blue in such cases is, therefore, calculated not only to exert a destructive and weakening action on pathogenic bacteria present, but to strengthen the resistive and reparative power of the cells. Of its special action on the diphtheria bacilli a full account has been given, and it is only necessary to call attention to one or two more facts. In the air passages, notably in the throat and larynx, the blue being in contact with moving air would remain blue, and being blue would be perpetually at work diminishing the virulence of the bacilli and destroying them. It possesses also two points of superiority over the other aniline colours in addition to its continuous cumulative action. 1. It is not destroyed by any species of bacteria. 2. There is an elective affinity between it and the Löffler bacillus. This may be shown in the following manner. Two pieces of tissue are stained, the one in 1 per cent. pyoktanin, the other

[6] Deutsche Med. Woch., 1890, No. xvi.
[7] Deutsche Med. Woch., 1891, p. 41.
[8] Compt. Rend., Soc. de Biol., Paris, 1893, 423.
[9] Berlin. Klin. Woch., 1891, No. 39.
[10] Bull. Méd., Paris, 1892, 943.
[11] Centralbl. f. Klin. Med., 1893, xiv., 25.
[12] The Johns Hopkins Hosp. Reports, 1892.
[13] Ungarisches Archiv für Med., Bd. ii., pt. i.
[14] Pester Med.-Chir. Presse, 1893, i.
[15] Therapeutische Monatshefte, 1893, p. 16.
[16] Bull. Gén. de Thérap., Paris, 1893, p. 396.
[17] Loc. cit. [18] Geneesk Tijdschr. voor Nederl.-Indië, 1893.
[19] Compt. Rend., Soc. de Biol., 1891, iii., p. 300.
[20] Medical News, Philadelphia, March 7th, 1891.
[21] Loc. cit.
[22] Zeitschrift für Hygiene und Infectionskrankheiten, Bd. xvii., Part 3
[23] Deutsche Medicinische Wochenschrift., 1894, p. 508.
[24] Loc. cit.

in 1 per cent. methylene blue, and after a four hours' wash are both dropped into a bouillon culture. After fifteen minutes the solution, if shaken, is seen to be blue and the blue piece of tissue to have lost its colour, while the violet piece retains it for forty-eight hours. A similar piece stained in the blue and added to a filtered culture holds its colour for several hours, generally twelve to twenty-four. To find out whether the blue could pass through false membrane and remain blue on the under surface of it, a large piece of the membrane moistened in bouillon was carefully spread out on the surface of an agar-agar plate crowded with colonies of the bacilli. On painting a little 1 per cent. solution of the blue on the surface the colour was seen to pass through, and on subsequent incubation no reduction occurred, showing that oxygen could follow the blue so far. Although this is hopeful, it must be admitted that the conditions very feebly represented those obtaining in a case of diphtheria. The fact that an agar plate containing the blue in proportion of 1 to 150,000 remains sterile implies that no extension of the disease could take place on mucous membrane showing the faintest trace of blue. The great objection to its use is that it is a stain, causing damage to sheets, &c., but this very property is at the same time of the greatest utility, for it would enable the physician to see whether his remedy was at work or not, and its absorption, marked by the disappearance of the colour, would afford a never-failing signal that a fresh application was required. The patient need not be disturbed more often than is necessary—a valuable fact—neither would too long an interval be allowed to pass. The experience gained by observing the first few patients would determine the necessary frequency of application. Although a 1 per cent. solution has been often mentioned in this paper, it will have been noticed that Kasem Beckh used a stronger one, and perhaps the best stain of all would be obtained by the use of a pencil similar to the pyoktanin pencil made by Merck of Darmstadt, and recommended by Stilling. For the larynx a spray would have to be used. Its possible surgical uses will have suggested themselves, especially seeing that it acts also on the staphylococcus. It is to be regretted that a tetanus culture was not available, since any oxidising action on that bacillus would render its local application in surgery of great value. Neither have I been able to test it on tubercle bacilli, but it has already been used in local tuberculosis with good results. It must be remembered that with the exception perhaps of its action on the kidneys, where it is constantly renewed, the blue can only do its work in the presence of air. For example, the blue could prevent extension of the disease to the nasal mucous membrane, but given nasal diphtheria, only an initial reduction and not a continuous action could be looked for where the nostrils were completely blocked. Finally, since the blue is found to have no mitigating action on toxalbumen already formed by the bacilli, in any trial made of it a preliminary use of chlorine water would seem to be advisable. This paper may with justice be called too suggestive. The omissions are many, and much remains to be done. My excuse is that this reaction between the blue and pathogenic bacilli seemed to deserve that immediate attention which I am at the moment unable to give it, and that I felt it my duty to make known my results as far as they were already attained.

It only remains to express my indebtedness to Professor Buchner for many acts of great kindness during my stay in Munich; to Professor Tappeiner, in whose laboratory the experiments were performed, for his never-failing courtesy and patience; and to Dr. Brandl for his constant kindness to me.

Munich, July, 1894.

SCHOLARSHIPS AT GUY'S HOSPITAL.—The result of the Entrance Scholarships Examinations in Arts and Science at Guy's Hospital have been announced as follows:—Science—First Scholarship of £150: Thomas Francis Rutter, B.Sc., University College, London; Second Scholarship of £60: John William Dunston, Guy's Hospital; Certificate of Honour: Francis William Brook, Guy's Hospital, and Ernest William Floyd, Owens College, Manchester. Arts—First Scholarship of £100: Arthur Pearson, Berkhampstead School; Second Scholarship of £50: George William Hare, Blenheim House School, Teddington; Certificate of Honour: George Lewin, City of London School; P. W. L. Camps, East Anglian School, Bury St. Edmunds; Charles Burrage Penny, Blackheath; and Guy Theodore Wrench, Repton School. Dental—Scholarship in Arts of £30: Guy Chatterton, St. Peter's College, Brockley.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

EXTRACTION OF CATARACT IN A MYXŒDEMATOUS SUBJECT AGED SEVENTY-TWO YEARS.

BY ROBERT KIRK, M.D. EDIN., F.F.P. & S. GLASG.,
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IN a paper entitled "Notes on Cases of Myxœdema" which appeared in THE LANCET in 1893[1] I mentioned the case of a woman seventy-two years of age, who had suffered from the affection for twenty-five years or longer, and who had been almost totally blind for the last three years and a half from double cataract. I there asked the question if the operation for cataract might be performed after the cure of the myxœdema. Previously the swollen state of the eyelids had proved a bar to operation, while it is probable also that there would have been larger of hæmorrhage or other disagreeable consequences. It may interest the readers of THE LANCET to learn that shortly after the appearance of the article above mentioned the operation was successfully performed on one of the eyes by my friend Dr. Freeland Fergus, ophthalmic surgeon to the Eye Infirmary of Glasgow. The patient can now with appropriate glasses read No. 3 Jaeger. Dr. Fergus said it was ordinary senile cataract, and that the operation presented nothing unusual. In the excellent report of the Committee of the Clinical Society of London on Myxœdema 109 cases are tabulated, and of these cataract is mentioned as occurring in three (in one of these the statement is "left lens hazy.") In another case blindness is said to have been an early symptom in a case of myxœdema, but nothing is said as to the cause. Defects of vision, however, and various affections of the eyes are mentioned in numerous cases.

Partick, Glasgow.

RARE DISLOCATION; THREE LUXATIONS IN TWO FINGERS.

BY J. FLETCHER HORNE, M.D., F.R.C.S. EDIN.

A MAN fifty-five years of age visited a friend on the evening of Sept. 24th of this year, and in entering the house over-balanced himself and fell with his left hand extended on the edge of the front doorstep. He came to me immediately saying he had broken his fingers. Dislocation of both the second and third joints of the ring finger and of the middle joint of the second finger was easily diagnosed, shortening deformity and loss of function being well marked. In the case of the ring finger both luxations were in the same direction backwards, the proximal end of the second phalanx being behind the head of the first, whilst the corresponding end of the ungual phalanx was behind the head of the second. The direction of the displacement in the second finger was forwards, the proximal end of the second phalanx being in front of the head of the first phalanx. Reduction by manipulation without an anæsthetic was effected by extension with firm pressure upon the projecting end of the dislocated phalanx, being accompanied in each case by an audible snap, which highly pleased the patient, considerable force in the extension being found necessary to obtain reduction in the two central joints.

Barnsley.

SEVERE DELIRIUM IN A CHILD OF TWO YEARS AND A HALF, CAUSED BY THE LODGMENT OF A SMALL STONE IN THE LEFT NOSTRIL.

BY A. DEAN ROBERTS, M.R.C.S. ENG., L.R.C.P. LOND.

ON June 26th a child (female) aged two years and a half was brought to me with the following history. Two weeks previous to the time I saw her it appears that a sharp-edged piece of flint was pushed up the left nostril while the

[1] THE LANCET, Sept. 23rd, 1893.

child was at play. The mother, being informed of the fact, took no notice of it, as the child did not appear to suffer in any way, not even with its breathing. However, on the evening of the 25th, she started up from her sleep in a state of wild delirium, and it was as much as her mother could do to hold her in bed. She imagined she saw rats, mice, and blackbeetles crawling over her and on the bed. This condition lasted for about two hours, when she sunk exhausted into a restless condition, tossing herself about and wandering in her mind at intervals. Next morning the child appeared to be herself, but all through the day seemed very irritable and took no food, and at times would raise a cry of alarm and look round about her and say that animals were going to do her harm; she was even afraid of the lace on her pinafore. The same evening I saw her, and at first sight she appeared quite rational. After obtaining as much history as was possible (the fact that the stone had been placed in the nostril was not told me), I examined her carefully and could find no source of irritation sufficient to account for the symptoms present. There was no intolerace of light, no bladder or rectal irritation, no ear or nasal trouble as far as I could ascertain, and no enlargement of the tonsil. The face was a little flushed; the temperature was 99·2° F.; tongue furred; pulse was quick, moderately full; skin a little clammy; urine pale, abundant, no albumen. I may add that while I was in the room she began to rave as before, but on assuring the child I managed to pacify her. Thinking this might be the prelude to some acute attack—pneumonia or meningitis—I determined to watch her for a day or two, ordered her to be kept quiet, prescribing at the same time a little bromide. On my next visit I found that a sharp-edged piece of flint, covered with thick mucus, and a little larger than a cherry-stone, had been ejected from the left nostril while asleep. The child is now well. She has had two or three attacks since, but now is quite free from them. There is no discharge save a little watery catarrh.

Lincoln.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. GEORGE'S HOSPITAL.

PULSATILE TUMOUR OF THE POPLITEAL SPACE, SIMULATING ANEURYSM; REMARKS.

(Under the care of Mr. A. MARMADUKE SHEILD.)

WHEN considering the diagnosis of a pulsating swelling along the course of one of the main arteries of the extremities the first question which presents itself to the mind of the surgeon is, Is it an aneurysm? In no part of the body does this question occasionally prove more difficult to answer at once than in the popliteal space. Tumours growing from the lower and back part of the space bounded by the division of the linea aspera are most likely to present a resemblance to aneurysm of the popliteal artery. Mr. Sheild's case illustrates one way in which a tumour in this situation may cause the surgeon to hesitate in giving an immediate answer to the question. Sometimes, again, the tumour itself pulsates and thus resembles an aneurysm, the contents of which have partly solidified. A tumour of this kind was under observation at St. Bartholomew's Hospital some years ago, and the resemblance was very close.

A diminutive, pale, emaciated man aged forty-two came to the out-patient department at St. George's Hospital on June 6th, 1894, complaining that his right knee was swollen and painful. On examination there were found to be some swelling and œdema of the foot and leg, with an ill-defined tumour in the popliteal space, which also extended over the inner side of the knee. The swelling was elastic and semi-fluctuating, and a bruit could be heard over it on deep pressure with the stethoscope, while obscure pulsation could also be elicited on firm pressure. The pulse below was unaffected. The patient stated that his knee had been swollen and painful for about six months. He had sustained no injury and had never suffered from syphilis. The patient's sister, however, made the important statement that the knee was painful before it ever swelled and that a medical man had treated her brother for "rheumatism" of the knee. The patient's circulatory system and general bodily condition were good; there were no enlarged glands or tumours elsewhere. The diagnosis of a diffused aneurysm implicating the knee-joint was at first arrived at, and the patient was admitted to the wards. It was resolved to watch the case for a short time, and the limb was raised and bandaged. On examination the next day the swelling and œdema were found to have decreased, and it was easy to detect that the sense of pulsation in the popliteal space was really due to the artery being pushed backwards by a swelling beneath. So distinctly did this swelling fluctuate, especially the part of it that extended towards the inner aspect of the articulation, that the opinion was confidently expressed that pus was present. An exploring syringe, however, to the surprise of several, negatived this, merely drawing off a little blood. The case was still further observed for about ten days, and iodide of potassium was administered in the hope that the swelling might depend upon some congenital syphilitic taint. At the expiration of fourteen days the swelling was if anything larger, and it was decided after consultation that it should be explored by incision, permission to amputate if needful being granted. This the patient would not consent to, and left the hospital. His case was kept under observation, and in about a month the tumour had increased in bulk considerably, the skin had become dusky and marked with blue veins, and the patient was very white and cachectic. In fact, all the evidences of malignancy were present. The tumour, however, fluctuated more distinctly than ever, and it was only the negative evidence of the exploring syringe that enabled abscess to be excluded. The evening temperature of the patient was also occasionally raised, still further simulating suppuration. Pulsation in the popliteal space was now very forcible and evident, but it was "up and down," not distensile, and obviously due to the displaced artery. The man was re-admitted into St. George's Hospital on Aug. 9th, and shortly afterwards amputation of the thigh was performed. Before amputating, Mr. Sheild cut into the knee-joint on the inner side, and was even then in doubt as to the exact nature of the case, the knee being distended with synovial effusion and the membrane thickened and markedly pulpy in appearance. The patient made a rapid and satisfactory recovery.

On dissection the back of the femur was found to be occupied by an oval, lobulated tumour of considerable size, and exceedingly soft and diffluent in consistence, like medullary substance or jelly. Large hæmorrhages were found in it, and it also contained cysts full of straw-coloured fluid. The popliteal artery was stretched over it. The tumour grew from the periosteal surface of the back of the femur and invaded the knee joint at the posterior intercondyloid notch. Microscopically it was a spindle-celled sarcoma undergoing myxomatous change.

Remarks by Mr. MARMADUKE SHEILD.—This case well illustrates some of the manifold difficulties that may attend the diagnosis of tumours in the popliteal space. The resemblance of the swelling, when first seen, to diffused aneurysm was very close, but when the œdema of the superficial parts had subsided it was easy to prove that the pulsation was not of the true distensile aneurysmal nature. The resemblance to popliteal abscess was then exact, and any want of caution, as by making a hasty incision, would have led to uncontrollable bleeding from the soft vascular growth. The case well illustrates the importance of using the exploring needle in deeply seated fluctuating tumours, and of observing their progress with care and patience before cutting into them.

THE STATION HOSPITAL, WINDSOR.

A CASE OF CEREBELLAR ABSCESS, THE RESULT OF CHRONIC MIDDLE-EAR DISEASE; OPERATION; DEATH.

(Under the care of Brigade-Surgeon-Lieutenant-Colonel C. E. HARRISON.)

THERE is much in the account of the following case which renders its perusal of interest. It is true that a large number of patients with cerebellar abscesses which have been

diagnosed and submitted to operation have not recovered after the operation, but without operation they invariably die. It is, therefore, necessary that the symptoms which such abscesses cause should be recognised when the abscess is in an early stage, for the best chance of recovery is afforded if the operation required is performed then. This case illustrates the occasional difficulty in localising the abscesses dependent on suppurative otitis media; and absence of retraction of the head, or other sign pointing to implication of the cerebellum rather than the cerebrum, made the course followed by the operator the wiser one. For the account of this case we are indebted to Surgeon-Captain M. T. Yarr, A.M.S.

Private ——, a delicate-looking soldier twenty years of age, was admitted into the Station Hospital, Windsor, on Jan. 31st, 1894, suffering from a profuse purulent discharge from the right ear, with much swelling of the external meatus, pain, and constitutional disturbance. He stated that the discharge had only existed two days, and that prior to this attack he had never suffered from ear trouble. Owing to the swelling the membrana tympani could not be seen on the day of admission, but on its subsidence two days later a small, jagged perforation could be detected antero-inferiorly below the handle of the malleus. Treatment consisted in gently syringing with a weak solution of Condy's fluid, insufflation of iodoform, and morphia to relieve pain, under which his condition slowly improved, and by Feb. 11th the discharge had entirely ceased, the temperature was normal, and the perforation showed a disposition to heal. The temperature during the attack was curiously irregular, varying between 99° and 103° F., except on the mornings of Feb. 1st and 6th, when it fell to subnormal, and the pulse on the same occasions to 64, without, however, any drowsiness, defective cerebration or articulation being present. From the first there had been no mastoid tenderness or pain. From Feb. 11th to the 22nd the patient gained flesh and strength rapidly, the pain and discharge had entirely disappeared, and he was very anxious to be allowed to return to duty. The perforation, though not completely healed, was very small. On the 23rd there was a slight return in the evening of the supra-orbital uneasiness, and the temperature rose to 100°. The pulse was 84. On the 24th the aching continued. There was no discharge from the ear, and the perforation was hardly visible. The pupils were normal. The morning and evening temperature was 99°. On the 25th and 26th the temperature was normal, but the aching continued, and he was inclined to be drowsy and irritable when roused. The pulse varied between 68 and 84. On the 27th the temperature fell in the evening to 97·4°, and the pulse to 68. The articulation was now thick and "slurring," and, though the patient could be easily roused to answer questions intelligently, cerebration was perceptibly slower than normal. The pupils were equal, sluggish, and neither contracted nor dilated. He occasionally groaned, and frequently put his hand to the right side of his forehead; he lay constantly on his left side. There was some slight intolerance of light. On the 28th he vomited several times a considerable quantity of dark green fluid. There were two actions of the bowels after the administration of a minim of croton oil. He passed motions and urine consciously, but was now very drowsy, and the articulation was very defective. The morning and evening temperature remained subnormal (97·4°) and the pulse 64. On March 1st his condition was unchanged. He had recently lost flesh considerably, and the complexion was sallow. The tongue was thickly coated and the breath offensive. The abdomen was retracted. Brigade-Surgeon-Lieutenant-Colonel Harrison, Grenadier Guards, saw the case at about 2 P.M. He agreed with the diagnosis of intracranial suppuration, and immediately proceeded to operate, assisted by Surgeon-Lieutenant-Colonel Melladew and Surgeon-Captain Yarr. As it was impossible to determine whether the abscess was located in the temporo-sphenoidal lobe or in the cerebellum it was decided to trephine over the first-named area, and if no pus was found to explore the cerebellum Chloroform was administered, but only a small amount was found necessary—about two drachms during the operation—as the patient only gave marked evidence of feeling pain when the skin and superficial structures were being divided. A small T-shaped incision was made down to the bone, and a trephine, five-eighths of an inch in diameter, applied with its centre at a point one inch and a quarter behind the centre of the external meatus and one inch and a quarter above Reid's base line. The circle of bone having been removed, and the dura mater cautiously incised, a trocar and cannula of medium size were passed into the temporo-sphenoidal lobe in three different directions, but without result. It was therefore decided to explore the cerebellum. For this purpose, after reaching the bone by a semilunar incision, a circle of bone was removed by a trephine—half an inch in diameter—applied with its centre at a point one and a half inches behind the centre of the external meatus and three-quarters of an inch below Reid's base-line, and a trocar passed inwards, forwards, and upwards into the cerebellum to the depth of an inch and a half from the surface of the skull. On withdrawing the trocar there was a free flow of yellow pus, devoid of smell, from the cannula. The amount of pus was not measured, but there appeared to be several drachms. The cannula was left *in situ*, three silver stitches were placed in that part of the incision immediately behind the ear, and the wound packed with strips of antiseptic gauze and powdered with iodoform. The T-shaped incision was also closed with silver wire, a small strip of gutta-percha tissue acting as a drain. Rather free hæmorrhage had taken place when the semilunar flap was being raised, but this was arrested by ligature and torsion. The pulse had been full and regular, and the respiration easy, throughout the operation, which occupied some considerable time. Half an hour after the operation cerebration was distinctly quicker and articulation improved. The patient drank some milk with a little brandy eagerly, and said he felt better. At 11 P.M. he was sleeping quietly. The temperature was 100°; pulse 100. He slept at intervals during the night (March 2nd). Cerebration and articulation were distinctly improved. The temperature at 7 A.M. was 99°. He passed urine consciously. The operation wounds were dressed at 3 P.M.; there had been some slight sero-sanguineous oozing, but both wounds were healthy. The bowels had acted once, and urine was passed freely and consciously every three or four hours. He took nourishment with avidity, but only small quantities were given at a time. At 11 P.M. the temperature was 101·6°; the pulse 112. The patient lay quite quietly, was very drowsy, but could be readily roused; he articulated fairly and answered questions sensibly. There was no evidence of pain, no twitching, or intolerance of light. On the 3rd there was little change save increased drowsiness; the temperature was 103·2° in the morning, 103·4° in the evening. On the 4th he was in a semi-comatose condition, and had been so during the night, but swallowed easily and passed urine voluntarily. Muscular twitching of the right side of the face and drawing up of the right angle of the mouth occurred frequently on that day. He was with difficulty roused, and the articulation was very defective. No paralysis could be detected. The pupils were unchanged. There was no vomiting. The temperature at 7 A.M. was 102·8°, the pulse 100, and at 11 P.M. they were 102·4° and 92 respectively. The pulse was full and regular. The patient gradually sank into profound coma and died quietly at 7 A.M. on March 8th; he had been unable to swallow for the last two days, and was fed by nutrient enemata. The temperature, which for the first fortnight in February had ranged irregularly from normal to 103°, remained normal for the rest of the month, save on the 23rd, when it rose to 100°. After the operation it rose to 100°, but fell one point the next day. From 99°, however, it rose steadily, reaching 103·5° on March 3rd, and it remained between 102° and 103° until death.

Post-mortem appearances fifty-five hours after death.—The body was emaciated. On removing the skull-cap slight general congestion of the meninges covering the upper surface of the brain was observed, and two small patches of yellow lymph situated in the left fissure of Rolando—i.e., on the side opposite to that which had been trephined. The brain was cut in slices horizontally without removing it from the skull. In doing this the tracks in the cerebrum made by the exploring trocar were exposed. In the neighbourhood of the lateral ventricle—especially at one spot—the brain-substance forming the walls of these tracks had a shreddy appearance. The fluid in the lateral ventricles was slightly turbid, and the choroid plexuses bore evidences of having been inflamed. On removing the cerebrum and the tentorium cerebelli extensive exudations of yellow lymph were found in the subarachnoid spaces over the pons, medulla oblongata, and crura cerebri, indicating basilar meningitis (leptomeningitis) as probably the immediate cause of death. An irregularly circular abscess cavity, about the size of a large walnut, was found in the right lobe of the cerebellum. This abscess had been freely drained by the cannula and contained no pus. On removing the cerebellum and separating the

dura mater from the skull, a patch of organised lymph was found on the outer wall of the right lateral sinus immediately below the point of entrance of the superior petrosal sinus. This patch of lymph was found to correspond on its outer surface with a piece of necrosed bone about the size of a threepenny-piece. The edges of this piece of bone, and of the bone surrounding it, had a worm-eaten appearance, and holes and depressions existed through which a probe could in two places be passed into the mastoid cells. On slitting up the right lateral sinus it was found to be occluded by organised lymph from a point near the torcular Herophili as far as the spot corresponding to the piece of necrosed bone, and to be partially occluded down to a lower level. There was nothing as regards the position of the trephine openings calling for remark, except that the upper one was rather dangerously near the lateral sinus. There was nothing of importance found in the thorax or abdomen. No abscess or infarcts, recent or old, were discovered in any of the viscera.

Remarks by Brigade-Surgeon-Lieut.-Colonel HARRISON.—This case is of considerable interest, both from the characteristic symptoms of intra-cranial suppuration which were manifested during life and the pathological appearances found after death. Although—as sometimes happens in these cases—no satisfactory history of antecedent chronic middle-ear disease prior to admission to hospital could be obtained from the patient himself, yet the symptoms of intra-cranial mischief rendered the existence of such chronic disease most probable, and the post-mortem appearances left no doubt that such had been the case. The occlusion—evidently of old standing in this case—of the lateral sinus, which was manifestly due to necrosis of the temporal bone, resulting from chronic disease of the tympanum and mastoid cells, points clearly to the fact that a non-septic thrombosis of the lateral sinus secondary to such a condition may run its course without proving fatal. This patient passed through the peril of thrombosis of the lateral sinus at some antecedent date, and died subsequently of another complication—viz., cerebellar abscess. At the time of his admission to hospital acute inflammation, I must conclude, had supervened upon the chronic quiescent disease, and on the subsidence of the acute inflammation the symptoms of brain abscess manifested themselves. There can be little doubt that meningitis was present at the time of the operation and subsequently led to the fatal termination of the case.

Medical Societies.

KIDDERMINSTER MEDICAL SOCIETY.

Intussusception in a Male.—Abscess of the Liver.—Lupus.—Chloroform Anæsthesia.

A MEETING of this Society was held on Friday, Sept. 28th, Mr. S. STRETTON being in the chair.

Mr. J. LIONEL STRETTON read notes on a case of Intussusception in a Male aged twenty years. On July 12th, 1894, whilst lifting a sixty-four gallon barrel of beer from a cart, the patient suddenly felt a severe pain in the "stomach," which made him drop the barrel. He walked home about half a mile, and went to bed, when the pain increased, and he started vomiting. Mr. Robinson, of Stourport, who saw him, ordered opium, and advised his removal to the Kidderminster Hospital. During the night the patient's bowels acted naturally. On admission to the hospital at 10 A.M. on July 13th the patient walked up to the ward quite easily, and did not appear to be suffering much pain. On examination of the abdomen the recti were rigid, there was no distension, and the pain, which was referred to the epigastrium, was only slightly increased on pressure. During the day flatus was passed at intervals, and vomiting occurred twice; the pulse was 75, and the temperature 99·6° F. He passed a quiet night and slept several hours, and there was no increase in his symptoms. On the afternoon of the 14th he commenced to vomit again, and continued until evening, during which time about 50 ounces of semi-digested milk, which was bile-stained, were egested, flatus was passed freely, and there was considerable hiccough; the pulse was 78, temperature 99·2°, and the respiration 25. At 9 45 P.M., as the symptoms appeared to be increasing, it was decided to explore the abdomen. On opening the abdominal cavity nothing abnormal was seen; a loop of bowel was withdrawn, and traced to the lower end of the ileum, where an intussusception about four inches long was discovered. There were flakes of lymph in the neighbourhood, and considerable difficulty was experienced in reducing the invaginated bowel, which was found to be œdematous and considerably congested. The whole was returned to the abdomen and the wound closed, a drainage tube leading down to the damaged bowel being inserted.—July 15th: The patient had passed a quiet night; slept several hours; no hiccough or vomiting; passed flatus. Has had one drachm of hot water every three hours.—July 17th: Temperature 98·2°; pulse 50. To have milk and water.—July 21st: Bowels acted after enema; stitches removed; wound healed.—Aug. 2nd: Patient up and about. The case was of interest on account of the very slight constitutional symptoms accompanying such acute local mischief, and this was explained as the patient convalesced, when it was found that his normal pulse was about 50 and his temperature about 97°, showing that in reality he was suffering from severe constitutional symptoms previously to the operation. It emphasised the advisability of an exploratory operation in doubtful cases.

Mr. J. L. STRETTON also read notes on a case of Abscess of the Liver, in which a gallon of pus was evacuated in a patient who a fortnight previously had undertaken a journey from the Gold Coast.

Mr. W. HODGSON MOORE showed a case of Lupus, also specimens of Biliary Calculi removed by operation.

Mr. P. E. DAVIES read notes on a fatal case of Chloroform Anæsthesia. The circumstances were as follows:—The patient, a male aged fifty-four, who at one time kept a public-house, and was well known to be of intemperate habits, had suffered from hernia (inguinal) for some years, for which he was in the habit of wearing a truss. During a "drinking bout" the hernia became strangulated, and when Mr. J. Lionel Stretton was called in the patient could give no exact information as to how long the "gut" had been down. Mr. Stretton found him in great pain, and vomiting fæcal matter. A quarter of a grain of morphine was injected hypodermically, owing to the pain, and after considerable persuasion he was induced to go to the infirmary. On arrival at the infirmary in Mr. Stretton's carriage, about 2 A.M. on Sunday, Sept. 9th, he was in a miserable and depressed condition; it is also worthy of note that he seemed to have an unusual dread of the operation, and remarked several times to the nurse that "he would not get through it." The heart was auscultated, and nothing abnormal discovered. Ether was first administered with Clover's inhaler (the usual amount, two ounces, being used). Owing to the violent and persistent struggling it was found impossible to "get him under with ether." After about four minutes' trial the anæsthetic was changed to chloroform, which was administered on a double fold of lint. He took the vapour well, and at this time his pulse was fairly good; unconsciousness followed in about three or four minutes, the pupils being contracted and the conjunctival reflex absent. The anæsthetic was then changed back to ether, with the intention of keeping him under with it. Whilst Mr. Stretton and Dr. Evans were shaving the patient prior to operation, without the least warning he suddenly ceased breathing (just before the respiration had been regular). Along with the failure of respiration it was noticed that the patient became ashy pale, particularly about the lips. The tongue was immediately pulled forward with an artery forceps, and artificial respiration resorted to; all the other usual restoratives were tried, such as holding up the legs, injections of brandy and strychnine under the skin, also hot-water enema and hot flannels over the heart, but without avail. After artificial respiration had been kept up for about four or five minutes the patient gave three voluntary inspirations. Duncan, Flockhart, and Co.'s chloroform (sp. gr. 1490) was used to the total amount of three to four drachms. No necropsy was ordered by the coroner, and unfortunately the friends' consent could not be obtained afterwards. A verdict in accordance with the medical evidence was returned. It may be added that at the time the morphine was injected the patient had refused operation.

Mr. P. E. DAVIES read a paper on the Diagnosis of Hysteria.

Reviews and Notices of Books.

A Collection of the Published Writings of William Withey Gull, Bart., M.D., F.R.S., Physician to Guy's Hospital. Edited and arranged by THEODORE DYKE ACLAND M.D., Physician to St. Thomas's Hospital. Vol. I. Medical Papers. London: The New Sydenham Society. 1894.

THE bibliography which is appended to this volume gives the titles of ninety-one papers on various subjects in medicine, which appeared from the year 1845 to 1888, from the pen of one of the most gifted physicians of the time. These contributions are scattered in the columns of journals and transactions of societies; but their interest and value are more than ephemeral, and the collection of them into two volumes is a work which does credit to the New Sydenham Society. The first of these volumes is the one now before us, which has been carefully arranged by Dr. Theodore Acland; and the second, which is to appear later, will contain the addresses on public occasions and a biography of the author. The selection of the papers for republication has been judicious, and several of the essays are of classical value. In the first place are Sir William Gull's contributions to certain diseases of the nervous system. Many of them found a place in the Guy's Hospital Reports, and all contain marks of acute clinical and pathological observation, with original and suggestive commentaries on the facts noted. The two opening papers here reprinted are on Abscess of the Brain, the one published in the third volume of Guy's Hospital Reports in 1857, the other contributed in conjunction with Dr. Sutton to Reynolds's System of Medicine. The former contains numerous records of cases of abscess which illustrate some of the modes in which the condition arises; they are preceded by a general survey of the knowledge then existing on the subject, and it is interesting to find the opinion expressed that surgical intervention may some day be resorted to. Thus he writes: "Clinical experience shows, however, that the brain-tissue will bear more mechanical interference than might have been supposed, and encourages the hope that, as knowledge increases, even here, our power may increase with it." He refers to a case recorded in 1849 by Detmold, a case "notorious from the doubts as to its veracity and the subsequent testimony to its truth." This was a case of cerebral abscess following compound fracture of the skull, in which the abscess was evacuated by incision, with the result that consciousness returned. Three weeks later stupor again came on and another incision was made, without result; a probe passed the next day took the direction of the lateral ventricle, and as a final resort the ventricle itself was laid open. The patient died the same evening, seven weeks after the first opening of the abscess, and it was found that the pus had made its way into the ventricles. A paper on Aneurysm of the Cerebral Vessels, published in 1859, is an excellent study of a subject that has often since been discussed at pathological societies. The Goulstonian lectures, delivered in 1848, established Dr. Gull's reputation as an authority upon disease of the nervous system, and in particular may be cited his discussion of Cervical Paraplegia therein contained. The subject of paraplegia, indeed, was one which he profoundly studied, and his papers which appeared in Guy's Hospital Reports have been frequently utilised by neurologists. His researches upon "urinary paraplegia" were of great service in showing the presence of actual changes in the cord and the inadequacy of the view that this paralysis was due mainly to "reflex" action. The record of a "Case of Progressive Atrophy of the Muscles of the Cord," in which there was found after death an enlargement of the central canal of the spinal cord (hydromyelus), is perhaps one of the first descriptions of the clinical and pathological features of the condition now known as syringo-myelia. Following upon these papers are those on Hypochondriasis (contributed to Reynolds' System of Medicine with Dr. Anstie), on Anorexia Nervosa,[1] and the memorable description of a Cretinoid State supervening in Adult Life in Women—the earliest recognition of the condition to which Dr. Ord subsequently gave the name of myxœdema. The editor has reproduced here a letter which Sir William Gull addressed to THE LANCET[2] in 1883, in which he showed that Dr. Hilton Fagge recognised the influence of the thyroid in counteracting the tendency to cretinism, the features of which, Dr. Fagge remarked, had been long since pointed out by Dr. Gull in his clinical teaching. The philosophical side of Sir William Gull's contributions to pathological knowledge was perhaps best exemplified in his writings upon chronic Bright's disease, and the doctrine of arterio-capillary fibrosis which he linked with that affection. The controversy which arose around his bold generalisation has been well-nigh forgotten, for the general truth of his contention has become part and parcel of pathological teaching. The minute analysis of the changes in the spinal cord and its vessels which formed the subject of a joint paper read by him and Dr. Sutton before the Pathological Society is also reproduced here with all the finely executed plates that illustrated it. He returned to this subject at the International Medical Congress at Copenhagen in 1884, in a paper which is valuable as showing his matured views on the relationship between the lesions in the kidney and in other organs in Bright's disease. We need not dwell upon other papers in this volume, which are none the less interesting and are marked by the writer's characteristics. They include his ascription of pulmonary gangrene in mediastinal disease to destruction of the vagus nerve and pulmonary plexus, although it is perhaps more simply explained by the effects of mechanical occlusion of bronchi; his papers (also jointly written with Dr. Sutton) on Rheumatic Fever; and that on Vitiligoidea. Whether we regard these writings from the point of view of science or from that of pure literature, they are equally worthy and attractive. They are sure to be perused again with pleasure, for they bear the impress of originality in thought and of vividness in diction, which contributed to make their author so striking a personality in the medical world.

A Text-book on Diseases of the Eye. By HENRY D. NOYES, A.M., M.D., Professor of Ophthalmology and Otology in Bellevue Hospital Medical College, New York. Second Edition. Illustrated by 5 Chromo-lithographic Plates, 10 Plates in Black and Colours, and 269 Wood Engravings. London: H. K. Lewis. 1894.

WHEN so many treatises on diseases of the eye appear in quick succession in Germany, in France, and in this country, it is not surprising that one should be produced in America embodying the results of recent research. Of course there may be some with which we are unacquainted, but the only works that may be regarded as at all complete in our recollection are those of Dr. Williams and of Dr. Schweinitz. The volume before us is much larger than either of these, and enters much more fully into questions of the pathology of many forms of disease. On the whole, it may be considered as a full and satisfactory exposition of the present standpoint of ophthalmology. The author has consulted the various journals devoted to this subject with care, and cites many interesting and typical cases, but he is not led astray by authority and does not fail to exercise his own judgment when there is a conflict of opinion. The value of the first edition was diminished by some faults of style which the author has taken pains, not always successful, to remove. Those subjects which seem to possess special attractions for the Americans, and have been studied by them with remarkable assiduity—such,

[1] Transactions of the Clinical Society, 1874
[2] THE LANCET, Dec. 8th, 1883.

for example, as asthenopia from muscular insufficiency and its treatment by prisms and lenses; strabismus and its treatment by tenotomy, together with the treatment of errors of refraction of all kinds—are, as might be expected, treated at considerable length, and in an interesting manner. The position held by the author as Professor of Ophthalmology in Bellevue Hospital Medical College and Surgeon to the New York Eye and Ear Infirmary, affording him a wide field of practice, enables him to speak with authority, since he has had the opportunity of adopting and comparing many or most of the plans and methods of operating proposed by others. Dr. Noyes devotes a page to the treatment of trachoma by jequirity, a method that we thought had long been given up on account of the uncertainty of the results and the serious nature of the inflammation it sometimes sets up. He gives drawings of Gibson's forceps, which are designed to seize the lid without injuring it, and to enable it to be everted in order that treatment may be applied to the follicles. In the section upon Entropium, Dr. Noyes states that he has found Green's operation give the best results, the theory of which is to make the integument adhere to the upper edge of the tarsus and tarso-orbital fascia in such a manner that it shall by its tension draw the ciliary border outward. He does not give the details of the method known on the Continent as the "Snellen-Hotz" operation, and which was described by Dr. Germann in the second part of the "Mittheilungen aus der St. Petersburger Augenheilanstalt," who has himself practised it in no less than 532 cases in the course of the last five years with great success. As there are five surgeons connected with the St. Petersburg Hospital, this number indicates, if they have all a corresponding number of cases, an appalling prevalence of this disease, from whatever cause it may arise, in Northern Russia. In his account of epithelial cancer and lupoid growths, amongst which, we presume, rodent ulcer is included, Dr. Noyes states that the solution of chlorinated soda (Labarraque's) diluted with five parts of water will often be followed by perfect cicatrisation of a suspicious and extensive ulceration. It should be applied for twenty minutes with a piece of lint six or eight times a day. The author states that he has observed this result many times during the last fifteen years. In our experience these affections have proved very recalcitrant to every mode of treatment, recurring even after free and apparently complete excision.

In cataract extraction Dr. Noyes operates without iridectomy and does not use eserine before operating, but employs cocaine on the preceding day with the object of learning how much mydriasis it will cause and to gain its hypotonic effects. He gives as indications for the performance of iridectomy in cataract extraction an inactive pupil; a pupil which does not dilate readily with cocaine; a perceptible degree of plus tension; a large quantity of cortical substance and indocility on the part of the patient; to which we should be disposed to add cases of bruising or laceration of the iris in the process of extraction.

There is evidence of some carelessness in the correction of the proof sheets for the press. To mention a few examples: "Chisholm," p. 672, should be "Chisolm," which is the more inexcusable as Dr. Chisolm is a well-known American ophthalmologist. "Lawrence," p. 294, should be "Laurence"; "Lindslay Johnson," p. 816, should be "Lindsay Johnson." "Grossman" is spelt correctly on one page, but a little further on, p. 328, "Grossmann"; "indirect," p. 40, last line, should be "direct"; "Streatfield," p. 265, should be "Streatfeild." Plate No. 6, referred to on pp. 291 and 677, is absent in our copy, perhaps accidentally, as the figures belonging to it are described at the end of the volume. Some of the sentences need revision: still, upon the whole, the work is a valuable contribution to the literature of this department of medicine. The illustrations which accompany the text are as a rule very good.

Rapports et Mémoires sur le Sauvage de l'Avignon, &c. Par ITARD. Paris: Aux Bureaux du *Progrès Médical* et Félix Alcan. 1891.

THE volume before us is a reprint of papers concerning a child pronounced to be an idiot by Pinel, but believed to be a foundling by Itard. He was caught in the woods of Caune towards the end of the year VII. of the Republic, being then eleven or twelve years old, and died in the Institution for Deaf-mutes in 1828. Pinel was right in his diagnosis, and Itard consequently made no great progress in the education of his pupil, but roused his intelligence more than could have been anticipated. His perseverance and ingenuity in achieving even so much as he did with so hopeless a subject were remarkable, and his method was based upon a scientific appreciation of the laws of education. It is claimed for Itard that he laid at this time the foundation of imparting speech to the deaf-mute, which in the present day has become the ordinary duty of institutions for the instruction of these unfortunate people. Apart from its scientific interest the volume before us is suggestive of much historical reflection. Itard lived during the most interesting period of French history, and his life is succinctly and gracefully sketched in the *éloge* by Bousquet which precedes the republication of the essay in question. We find during this period a kingdom transformed into a republic, and chaos evolving an empire, to be again reduced to a kingdom. Humanity is convulsed; dynasties pass away to be replaced by others; but in the calm, inevitable, and continuous progress of science we also find these changes chiefly marked by the alteration of an adjective: a republican institution becomes an imperial one, and the latter gives place to one termed royal. The *Progrès Médical* has done good service in publishing in so convenient a form these interesting papers and in thus bringing to the memory of the present the achievements of the past. Were the past more methodically and persistently studied the present might be robbed of much of its originality, but the future would be all the richer in valuable observation and sound conclusion.

Analytical Records
FROM
THE LANCET LABORATORY.

"VIMBOS" FLUID BEEF.

(THE SCOTTISH FLUID BEEF COMPANY, HOLYROOD-SQUARE, EDINBURGH.)

AN important and noteworthy feature in this preparation consists in its high degree of concentration, as exhibited in the following figures of our analysis: Moisture, 19·00 per cent.; mineral matter (chiefly extracted phosphates and common salt), 23·40 per cent.; meat extractives, 57·60 per cent., of which as much as 7·46 parts are nitrogen. "Vimbos" accordingly represents the entire extractives of meat in small compass. It is particularly palatable, being quite devoid of that burnt flavour which is not infrequently met with in similar preparations. It is valuable of course, chiefly for the restorative and stimulating properties of the crystalline and non-crystalline meat principles, which it contains in excellent proportion. On this account we regard it as an excellent and vigorous food adjuvant rather than a complete food, since it does not contain the fibre and albumen which compose the real nutriment of properly prepared beef-tea.

GRANULATED EFFERVESCENT BITARTRATE OF LITHIA.

(ALFRED BISHOP, 17, SPECK'S-FIELDS, MILE-END NEW-TOWN, E.)

In a paper on the Dental Manifestations of Gout recently published in this journal[1] Dr. Kirk, Doctor of Dental Medicine, of Philadelphia, U.S.A., points out the value of lithium bitartrate in the treatment of this malady. In seeking for some constitutional remedy for

[1] THE LANCET, June 30th, 1894.

the abnormal condition of the labial mucus he was led to select bitartrate of lithia, the organic acid radical in which would serve to produce an alkaline reaction of the secretions, particularly of the urine, while the lithium would enhance the solvent power on uric acid. Dr. Kirk was so satisfied with the use of this salt that he was impelled to call attention to its value in the hope that the well-known prevalence of gouty affections in England might afford a field for a wider and more complete study of the therapeutic possibilities of this drug, and at the same time to acquaint others with what so far appears to be its strongly-marked value in the treatment of disorders dependent upon the uric acid condition. The promptness of its action is in many cases, observes Dr. Kirk, astonishing, a subsidence of distressing symptoms quickly following an administration of three doses of 5 grains each taken four hours apart in a half-pint of water on a reasonably empty stomach. This has suggested the preparation of a granular effervescent bitartrate of lithia (containing five grains to the drachm), a specimen of which Mr. Bishop has recently submitted to us. The preparation is agreeably effervescent and pleasant to take, while a chemical examination deduced both the proper quality and quantity of the lithium salt. The results obtained by Dr. Kirk will doubtless induce many to exhibit this remedy in the pleasant form which Mr. Bishop has succeeded in producing so satisfactorily.

WILHELMINA WATER: SALINE-CHALYBEATE (HAARLEM).
(LONDON: W. SCHACHT AND CO., 26, FINSBURY-PAVEMENT, E.C.)

This water is drawn from the Wilhelmina spring at Haarlem and has attracted some attention amongst continental medical men on account of its marked saline and chalybeate properties. It is charged with carbonic acid gas under slight pressure and yields up its iron in the form of hydrated oxide on prolonged standing in contact with air. The slowness with which the iron thus separates is probably an important feature in connexion with its reputed value as a tonic, this stability being aided doubtless by the coexistence of alkaline salts. Analysis gave the following results: Total mineral solids, 7·61 grammes per litre; chlorides of magnesium and sodium, 5·76 grammes per litre; iron calculated as Fe_2O_3, 0·10 gramme per litre. The iron exists in perfect solution as proto-carbonate. The water is not unpleasant to drink, possessing, in spite of the comparatively large amount of iron, merely a perceptibly inky taste. It is doubtless a useful medicinal chalybeate, while the presence of magnesium and other salts probably modifies its action, especially in regard to the otherwise constipating effect of iron and its salts. It is not correct to state, however, that this water contains more iron than is present in the waters of the Flitwick chalybeate spring; yet we notice a statement on the label of the bottle classing the last-named with many other waters as inferior in this respect, although it is true that the iron exists in quite a different form.

BANANA FLOUR AND DRIED FRUIT.
(H. C. HAMILTON AND CO., GRAND CANARY.)

Banana flour is characterised by the readiness with which it softens and dissolves under the influence of the saliva; it probably presents, therefore, some advantages of distinct dietetic value. The fresh banana is regarded by many as not only possessing substantial nutritive properties, but also such as render it well adapted for invalids; it cannot be regarded, however, in the light of a recent analysis we have made, as a food of marked nitrogenous value, while it is also deficient in the constituents that minister to the mineral repair of the body. Thus the composition of the flour, according to our analysis, is as follows: Nitrogenous matter, 4·80 per cent.; mineral matter (almost entirely alkaline carbonate), 1·10 per cent.; moisture, 12·40 per cent.; starch and sugar, 81·70 per cent. Notwithstanding the process of drying which it has gone through, the characteristic aroma of the fresh fruit is preserved in the flour, while the flavour is agreeably sweet from the presence of sugar, which is also an important normal constituent of the banana. The flour may be confidently recommended for use where cereal starches are not easily tolerated, or where an agreeable change of farinaceous diet is required, as it is decidedly pleasant to the taste. From the same firm we have received dried samples of banana fruit, which, though not very attractive in appearance and sticky to the touch, are acceptable to the taste, while they undergo that rapid dissolution in the saliva which, as has already been pointed out, is characteristic of the fresh fruit or the prepared flour.

New Inventions.

A NEW POISON BOTTLE.

IT has been a subject of wide comment, and our columns to-day and often of late have but too patently justified such comment, that accidental poisoning has become very frequent. We have already detailed several mechanical inventions designed to obviate these calamities; and have recently received from Mr. R. H. Quine of Pendleton, Manchester, a specimen of a poison bottle which we consider to fulfil in most respects what is urgently required by the public. Mr. Quine has had in his mind chiefly one form of accidental poisoning, though it is the commonest—that where an external remedy is given internally.

Mr. Quine's description of the bottle is as follows: "A poison bottle should have the following characteristics: (1) some absolutely distinctive peculiarity; (2) which can be as easily distinguished in the dark as the light; (3) which does not depend on loose parts such as screw stoppers, which may be lost; (4) which does not render the bottle inconvenient for ordinary use; and (5) make the bottle more expersive than the ordinary bottle. At the present time the ordinary poison bottle depends for distinction on colour, which is useless in the dark; fluting,

which is easily overlooked unless specially felt for; and its hexagonal shape. These bottles are generally from 40 per cent. to 60 per cent. above ordinary bottles in price, and therefore are not used except in a comparatively few cases. The same remark applies to all forms of bottle with screw stoppers that I have ever seen, and they will never come into general use until they are as cheap as ordinary dispensing bottles. Medical men and druggists will not use expensive poison bottles unless compelled by law to do so.

"I have designed a bottle with the following peculiarities, samples of which I send you.

"*Position.*—The bottle must be always lying down, so that the word 'Poison' and the label are always in view; and this peculiarity is as readily to be distinguished in the dark as in the light. A peculiarity of grip is necessary in handling it, for the fingers have to touch the table when lifting it. In *shape* it differs entirely from ordinary medicine bottles, and the peculiarity of neck cannot be overlooked when corking or uncorking.

"*Convenience.*—The bottle is much more convenient than ordinary bottles when used for liniments or lotions to be applied by hand and for painting, as the brush has only to be introduced a little way into the bottle even when nearly empty.

"*Cost.*—It is as cheap as an ordinary bottle. I hold that medicines which are for internal use should be put up in bottles which stand upright, and applications for external use in bottles which will not stand upright."

THE LANCET.

LONDON: SATURDAY, OCTOBER 6, 1894.

THERE is at least one strong argument for the delivery of introductory addresses at the beginning of the medical session, which custom, in spite of all objectors, still holds its own at most of the large medical schools. They constitute a medium between our profession and the public. The publication of them in the leading journals once a year comes opportunely to enlighten the public as to our objects, and our difficulties, and to elicit from the critics all they can say either in the way of praise or of blame. For ours is a silent profession. The members of other professions work more or less in public — in churches and in courts. Their work is done in public—ours is essentially different. It is eminently quiet, unobtrusive, and unheard, save when some important life on which the fate of nations turns seems to depend on it, or when some great epidemic rages and gives a sense of insecurity to communities. Let us admit freely that the great organs of the Press cheerfully embrace the opportunity and give us such a share of attention as reflects the public interest in our calling. It could not well be otherwise. Each year sees the enlargement of medical duty and the development of medical study. The relations of the State to medicine grow more numerous and more complicated. The lessons of medicine become more irresistible as they become more clear; and society begins to see that it has a greater interest in medical education than in almost any other branch of professional culture.

Still, the great end of introductory addresses is to appeal to the student, and especially to those students beginning their studies. Some critics forget this, and they criticise the addresses unmindful of the fact. The majority of young men on the threshold of so great an undertaking as the study of medicine have need of an encouraging and guiding word from their teachers. The greatest physicians of our time and of other times have been men who could speak with eloquence and with pathos to students on their work, on the inducements to do it faithfully, and on the disastrous consequences of low conceptions of the nature and scope of it. Such men as Sir THOMAS WATSON and Dr. LATHAM, not to mention living men, have left behind them words which still speak to both teachers and students of medicine. Dr. LATHAM was not excelled as a clinical teacher, and his general addresses on medical education, on the spirit in which it should be prosecuted, on the subjects to be studied, and on the limitations which teachers and students should impose on themselves for the sake of efficiency and thoroughness in what is essential, remain models for those whose difficult duty it is year after year to speak words of wisdom and of encouragement to those entering the medical profession. It may be said that the aspect of medicine and the treatment of patients have been entirely altered since the days of Sir THOMAS WATSON and of Dr. LATHAM. And this, of course, is true. But the qualities which made them great physicians and teachers have still the same value as ever. The principles of medical conduct they laid down, the account of the *mens medica* which they gave, and the value of medical wisdom as distinct from mere medical knowledge still hold good and still call for distinct enunciation from authoritative lips in the course of the student's career. And rightly they constitute the staple and principal part of all the addresses this year. The crowded competition of the profession, and the squeezing into the curriculum of ever new subjects, make it even more necessary that serenity of mind and clear vision as to purpose and use and duty should obtain in every department of work and in every year of the medical course. The chief and paramount use of the introductory lecture is to encourage the student and to convince him that it is possible in the given period, with good moral qualities and a fair use of his time, and with proper intervals for relaxation and pleasure, to acquire sufficient knowledge to pass reasonable examinations, and sufficient wisdom and humanity to deal tenderly and efficiently with disease when the time comes for him to be responsible for its treatment. It is useless to ignore the fact that the ever-accumulating number of subjects to be studied and examinations to be passed are a constant temptation to the inferior student to scamp and rush his work, and that they strain the health and spirit even of the best students. But much may be done even now with the load of fifteen subjects, and more impending, to reassure the diligent and conscientious student and to put him into that frame of mind which will best enable him to do his work and make a creditable appearance at the end of the curriculum. Some of the addresses which we publish to-day are models of what such addresses should be. There is, however, in almost all of them one great defect. They contain little warning to teachers of medicine and to examining bodies to consider the student somewhat more; to remember the limitations of human nature between the ages of, say, eighteen and twenty-three.

For ourselves, we have only to offer to the students beginning their work words of hearty encouragement and congratulation. And in the intervals of their work let them not forget to study great medical lives, as represented both by the dead and the living. When Dr. LATHAM was at a loss to enumerate the qualities which constitute medical character he held up to admiration two actual physicians. Let students follow him, and study for themselves lives that are full of human interest and usefulness, and guide their own lives accordingly.

WE all know, even the idlest among us, that as a source of genuine satisfaction—of pleasure in the higher sense—there is nothing comparable to systematic, congenial, and successful labour. We have all to satisfy the judge within, to win our own self-approval, and this can only be truly done by proving ourselves fit workmen in some chosen field of human endeavour. But it is unnecessary at the present day to insist that the daily toil calls for not only diurnal, but annual remissions. The annual holiday is one of our recognised institutions, and we will take Sir GEORGE CORNEWALL LEWIS'S oft-quoted sentiment as to the unendurability of life's pleasures as the text of a brief inquiry why this holiday

often fails of its avowed object and becomes an acknowledged failure.

A holiday may prove disappointing and devoid of any true satisfaction because it has not been well earned. Only the true workman thoroughly enjoys his annual rest. The idle, the trifler, the man of pleasure, know little of the delights which the autumn relief from labour and responsibility confers upon the hard-worked merchant or professional man. This fact is in accordance with the deep law of human nature that contrast is necessary to enjoyment, and that monotony is fatal to it. If life be one long holiday, then the special pleasures of summer or autumn lose more than half their zest. There is something pathetic in the daily illusive struggle after pleasures which goes on at many a resort where the professional pleasure-seekers congregate and where the *bonâ-fide* invalid or the hard-worker, temporarily resting from his labour, is conspicuously absent. This struggle is nearly always in vain. Human nature is always the same, and a surfeit of good things invariably leads to repletion. CARLYLE has said some severe things about the necessity of men earning what they eat. It is equally necessary that they should earn their annual rest, if that rest is to afford them any deep or abiding satisfaction.

Holidays, again, fail of their expected pleasure often because they are ill-arranged and ill-adapted to individual tastes or idiosyncracies. It is a common error, for example, to imagine that nearly everybody has an innate love of natural scenery. As a matter of plain fact, there are multitudes, by no means necessarily ignorant or uncultivated, who have no real pleasure in the beauties of mountain or lake, river or glen. Many a man feels himself uplifted, feels his whole nature expanded and invigorated, by such a grand prospect as the view from the Rigi or Pilatus or the Gorner Grat. But this feeling is by no means universal. The ancients saw no beauty in lofty mountains which struck them simply as inhuman or austere, and even such an exquisitely cultivated individual as the late Dean STANLEY regarded the Alps simply as "huge lumps." The feelings which the Lake Country excited in WORDSWORTH and COLERIDGE seem forced and unnatural to many persons, simply from a difference of temperament. In this matter it is important to be honest with ourselves. Just as there are many born with a congenital deficiency in musical ear who would strive in vain to derive any real satisfaction from an art for which they have no natural faculty, so there are others who lack the power of appreciating natural scenery, and who had better content themselves with acknowledging their defect rather than feign a pleasure which they do not feel. For such persons there are often compensations. To recur, again, to the indefatigable traveller already alluded to—Dean STANLEY—it is recorded of him that while almost blind to natural beauty he was most keenly alive to scenes of literary association or historic interest. The Alps left him cold, but he revelled in Rome and was stirred to his profoundest depths upon the plain of Marathon and before the ruined shrine of Delphi. Therefore, if any of our readers are conscious of indifference to scenery, it is more than probable that their true pleasure may lie in historical or antiquarian research or in the contemplation of art. Such persons had better avoid the Scotch Highlands or the Swiss lakes and betake themselves to the art cities of the Netherlands, or the battle scenes of the Franco-Prussian War, or Weimar, Eisenach, Dresden, Nuremberg, or Munich. They are unfortunate, indeed, if none of these places arouse their enthusiasm and give them that complete mental distraction which is one of the first conditions of a successful holiday.

Again, some definite object may often be most advantageously combined with the general idea of rest and change which is the fundamental notion of the annual holiday. The man with a turn for natural history will find that the study of Alpine flora lends a pleasant additional zest to a Swiss tour. If the taste lean to painting, the systematic examination of the continental galleries year by year will pleasantly fill in the hours of leisure. A determination to visit all the principal cathedrals of Europe has been known to give system and motive to the annually recurring opportunity for travel. To members of the medical profession a determination to visit the chief foreign health resorts and spas—Carlsbad, Vichy, Homburg, Kissingen, Ems, Aix, Contrexéville, Baden Baden, and many others—will give just that fillip to the annual holiday which is so often wanting when that holiday is virtually aimless.

A holiday is often spoiled by attempting too much. The necessity for rest should always be kept in view, and long and fatiguing railway journeys or mountaineering excursions should only be undertaken with caution. Many things—age, physical condition, previous training, &c.—have to be considered in this connexion. A holiday should involve a complete change, but if this change be too violent mischief will result. The middle-aged man of sedentary habits may seriously strain his muscles and his heart upon the Weisshorn or the Jungfrau, who would have obtained quite as complete, and a much safer, change on the deck of a well-appointed yacht. It is well to be energetic in work, but we should moderate our ambition in pleasure-seeking. Anything which interferes with regularity in food and sleep will, beyond a certain point soon reached for most people, ultimately do harm.

Few forms of holiday are so entirely unobjectionable as a sea voyage, always provided that the traveller is a moderately good sailor. Rest, quiet, fresh air, change, invigoration—all these may be fairly hoped for at sea. The number of people whose persistent proneness to sea-sickness makes a voyage prohibitive is probably small. Toleration is, in the great majority of cases, soon established. Much depends upon the appointments of the steamer or yacht, much also upon the character of the ship's company; but there never was a time when the opportunities for a pleasant and comfortable voyage of any duration from one week to six weeks were so abundant as now. We regard this as one of the happiest features of the remarkable modern development of travel.

THE subject of "the law in relation to the criminal responsibility of the insane" has once more been placed before the public for discussion by means of a paper read before the British Medical Association at Bristol, in August last, by Dr. LIONEL WEATHERLY. The answers of the

judges in 1843 to the questions put to them by the House of Lords form the basis of the legal position taken up in criminal cases where the plea of insanity is urged. The direction given by the judge to the jury in such cases is that to establish a defence on the ground of insanity it must be clearly proved that at the time of committing the act the party accused was labouring under such a defect of reason from disease of the mind as not to know the nature and quality of the act he was doing, or, if he did know it, that he did not know that what he was doing was wrong. The corollary to this juridical direction is stated to be that if the accused was conscious that the act was one which he ought not to do, and if that act was at the same time contrary to the law of the land, he is punishable. Objection has been urged time after time to this statement of the position; and the righteousness of decisions in individual cases where the judge has directed the jury strictly in the sense here given, and where the jury have followed that direction, has frequently been called in question with such vehemence as to lead to a remission of the sentence. In other cases, as Lord BLACKBURN put it, "the jury have taken the bit between their teeth," and defied the judge's guidance as to the law by their verdict, asserting their belief in the prisoner's insanity and irresponsibility. "We mental physicians," says Dr. WEATHERLY, "maintain that the existing law is wrong, and that it is not in accord either with our practical experience or with the advance of mental science." This advance of mental science, whatever it may amount to, has at all events been the means of initiating the process of education which has made itself manifest in the minds of our judges in later years, and which has so largely tended to turn the fifty-year-old rigid dictum of "knowledge of right and wrong" into a merely traditional usage, supported in consonance with a practice which, as Sir JAMES STEPHEN says in his "History of the Criminal Law," he has himself followed on several occasions, and which, he adds, no judge can be expected to do otherwise than follow until some more binding authority is provided. As a proof of this change of front, leaving out the idiosyncrasies and methods of a limited few of the judges, we cannot do better than quote Sir JAMES STEPHEN'S words: "I cannot help feeling, however—and I know that some of the most distinguished judges on the Bench have been of the same opinion—that the authority of the answers (given by the judges in 1843) is questionable, and it appears to me that when carefully considered they leave untouched the most difficult questions connected with the subject and lay down propositions liable to be misunderstood, though they might, and I think ought to, be construed in a way which would dispose satisfactorily of all cases whatever." This statement was made in 1883, and since that date other judges have in some cases more or less openly expressed their difficulty as to the applicability of the ruling of 1843, or have modified its technical phraseology, while in other cases they have, in their summing-up to the jury, tacitly ignored the ruling. This being so, we are fully justified in holding that the legal test of responsibility in criminal cases where the plea of insanity is raised is not only insufficient but is also misleading and capable of doing grave injustice if strictly adhered to. What is the remedy which Dr. WEATHERLY proposes for this state of things? He suggests the following as the questions which should be placed before the jury, and which the medical experts should be examined upon: 1. Was the accused at the time of the commission of the act with which he is charged, and before that time, labouring under such mental disease as to render him certifiably insane? 2. If insane, how far was the crime the outcome of his insanity? If, as Dr. WEATHERLY says, the legal dictum is to be condemned for its want of latitude, we fear that the condemnation applicable to Dr. WEATHERLY'S proposed questions is that they permit too much latitude. The risk in this case will come to be that in the search for insanity the question of mere criminality will be apt to be lost sight of. As the writer of the leading article in the *Time* of Aug. 4th says—and not without some truth—the proposed change in the law "would throw upon the jury a task infinitely more difficult than it has to discharge at present." He goes on to ask, How is a jury to determine whether a man is "certifiably insane"? how is any man to attach a definite meaning to "certifiably insane"? "The phrase can only mean that a couple of doctors can be found to certify that in their opinion the man is insane." Under ordinary circumstances the meaning or the application of the phrase is simple enough, but its use in relationship to the complex issues that have to be determined in courts of law in criminal cases could scarcely fail to lead to confusion by its vagueness, for it is the duty of medical men to help the law not only to avoid hanging insane persons but also to prevent sane and responsible criminals from evading justice on a false plea. In seeking for a solution of this great difficulty we, as medical men, must be prepared not to overlook any standpoint from which the mental elements of responsibility ought to be considered. The question is not a purely medical question any more than it is a purely legal one. Reverting once more to Sir JAMES STEPHEN, we are glad to be able to quote from him in this relation the following important expression of opinion: "I believe that by the existing law of England those elements (so far as madness is concerned) are knowledge that an act is wrong and power to abstain from doing it, and I think it is the province of judges to declare and explain this to the jury." The admission of this element of "power to abstain" is, to our thinking, all-important and should never be lost sight of when the question comes up. In connexion with the points raised in Dr. WEATHERLY'S paper, which dealt very cogently and straightforwardly with the subject of the existing state of the law, influential subcommittees of the British Medical Association and the Medico-Psychological Association have been appointed to investigate the whole position of the case and to report. The subject will, therefore, be again brought to public notice in due course.

THE report of the Royal Commission on the amalgamation of the City and the County of London has been issued, and the subject is now ripe for legislation. The Commission were instructed to consider the proper conditions under which this amalgamation could be effected, and to make specific and practical proposals for the purpose. The report is a thoughtful and well-considered document, conciliatory in its

tone and thorough in its treatment of the subject. It is in all respects fully calculated to attain the object in view—the settlement of a vexed question with the minimum of irritation. There is nothing surprising in the recommendations of the Royal Commission. It has long been recognised by those who have considered the problem that London must be regarded as one municipality, and the credit is due to Mr. RITCHIE that he did not fail to take advantage of the legislation of 1883 to give to London a representative body exercising jurisdiction over all parts of the great community. The question which remained to be solved was the extent to which local administrations should be maintained, and, in the event of their retention, the relation in which they should stand to the central administration. The Commission propose to leave them almost untouched, except that smaller areas will be grouped to constitute larger areas better worthy of separate representation. For the districts in London there is nothing but gain. It is recommended that their powers should be increased rather than diminished. Their dignity is to be maintained, and their chairman is to be styled a Mayor. For the City there is undoubtedly diminution of glory, for whereas before it elected a Lord Mayor of London, it will in the future elect only a Mayor, and the Lord Mayor will receive his title at the hands of the body representing the whole of London.

Of the questions considered by the Commission, that in which we feel the greatest interest is necessarily the public health. The opinion is definitely expressed that all duties which are purely local should devolve on the district authorities, assuming that these authorities are to be retained. This is undoubtedly a wise proposal, for the central body must be relieved of all work of detail so far as is consistent with its efficient performance. There is no reason why some of the local inspectorial work of the County Council should not be performed by the district authorities if the ratepayers elect proper representatives, although the licensing of cowsheds and slaughter-houses and the future control of the establishment of noxious trades are safer in the hands of a central body further removed from local influences. In such devolution it will be necessary to maintain for the central body a power of making regulations, and, further, of taking steps for their enforcement, should there be local apathy or want of interest in local administration. The Public Health Act of 1891 has already established a sound principle of government in giving the central authority opportunity of inquiry and supersession where this is needed, and if the new Corporation should carry on the work with the same vigilance and activity as the existing County Council it may be expected that that body will find scope for its efforts in ensuring uniformity of administration of a sufficiently high standard in all parts of the metropolis. It must moreover deal with the larger questions affecting the public health, and if it is called upon at a later date to undertake the duties now performed by the hospital-providing authority its work will be sufficiently onerous. Upon the district authorities will devolve all work to be performed in connexion with the registration of births, deaths, and marriages, as well as vaccination. The association of the duty of the enforcement of the law relating to vaccination with bodies responsible for the public health is a distinct advance, which will, we trust, do something to lessen the accumulation in the metropolis of persons susceptible to small-pox. The proposal that members of the central council elected in a district should be *ex-officio* members of the district authority will serve to keep the members of the central and local bodies in touch with each other.

The changes recommended in the report are, as a whole, well worthy of adoption by Parliament, but in detail they may require some amendment. It cannot be said that they unify London: they are a step in that direction, but they leave something to be desired for the purposes of a complete system of health administration. Indeed, the establishment of such a system was evidently not the duty of the Commission, but only the amalgamation of the City and the County—a change necessary before more complete unification for health purposes can be effected. But this will serve a useful purpose, and it may be hoped that the greater dignity which will be conferred on the central council will strengthen it in the performance of the great work which lies before it.

Annotations.

"Ne quid nimis."

THE HEALTH OF THE CZAR OF RUSSIA.

THE varied and conflicting accounts of the state of health of the Czar which have been floating about Europe during the past fortnight must be received with great reservation. It is, we fear, beyond question that His Majesty has for some time past been failing in health, and that his hitherto robust constitution was much shaken by the attack of influenza from which he suffered a year ago. The fact that Professor Leyden was summoned in consultation with Dr. Zakharin showed that his illness was one of some gravity, and the statement that it is of the nature of renal disease is borne out by such accounts of its symptoms as have been made public. If, as seems probable, the malady has recently been aggravated by exposure, the anxiety which would be caused by the supervention of acute symptoms on a chronic disorder would naturally be great; but whether this be so or not, the Czar has happily recovered sufficiently to be able to travel, and we may hope that a sojourn in the warm and dry climate of Yalta, free from the anxieties and responsibilities of his high position, will suffice to ward off any exacerbations of the malady and tend to restore the illustrious patient to health.

SIR GEORGE MURRAY HUMPHRY.

AT the quarterly meeting of the governors of Addenbrooke's Hospital, held on Monday, Oct. 1st, Sir George Murray Humphry, F.R.S., Professor of Surgery in the University of Cambridge, tendered his resignation of the post of senior surgeon to the hospital. To all members of our profession Professor Humphry is known as a great anatomist and a great surgeon, while his services to the profession as a member of the General Medical Council and to the Royal College of Surgeons of England as a member of the Council and the Court of Examiners have been as patent as valuable; so that all of us must learn with regret that he has thought fit to take any step tending in the least to remove him from the practical side of the profession to which he is an ornament. But to Cambridge men the fact that Professor Humphry has resigned will come with particular force, for to them we make bold to say he has been for years the most tangible fact in

medical education at the University school, and around him, his learning and his personality, the most distinct of their educational recollections will be indelibly grouped. As Professor of Anatomy for seventeen years he was brought into contact with every student at the Cambridge school, and we are glad to remember that as the present Professor of Surgery his intimate relations with the students will persist, and, we hope, will long persist. For English medical schools contain few such teachers as Sir George Humphry. His transit from the position of senior surgeon to that of consulting surgeon to Addenbrooke's Hospital was marked by an act of graceful generosity, an act which we should term singularly generous, were it not that it was exactly the kind of deed we should have expected from him. In his letter of resignation was enclosed a cheque for £500, to be used by the governors "for the purpose of increasing the out-patient department of Addenbrooke's Hospital." The Mayor of Cambridge moved a resolution upon the receipt of Professor Humphry's letter: "That, in accepting his resignation, the governors resolve to place on record their grateful sense of the invaluable services he has during half a century rendered to the institution, both as a place for the relief of the suffering poor and as an important centre of medical education; that, subject to his acceptance of the office, he be, and hereby is, appointed consulting surgeon to the hospital; that the chairman be requested to convey these resolutions to Sir George M. Humphry, and to express the hope of the governors that he may long be spared to aid them with his counsel and assistance." The Rev. H. Hall proposed, and Dr. MacAlister seconded, a motion: "That the cordial thanks of the court be given to Sir George M. Humphry for his munificent donation of £500 for the purpose of improving the out-patient accommodation in the surgical department" Both resolutions were carried by acclamation—as was fitting.

THE LAW AND THE PROTECTION OF CHILDREN.

OUR national reputation for humanity will not be enhanced by some recent police-court revelations. It would appear from these as if cruelties when perpetrated upon children were wilfully aggravated in proportion to the helplessness of the victims. According to the published reports of such cases their number during the present year has markedly and steadily increased. From a monthly register for last December of 1157 it has risen by progressive stages to 1389 for the month which has just closed. As regards barbarity little remains for reprobation. The variations and refinements of ill-usage adapt themselves to every change of place and circumstance. Of starvation, filth, and general neglect there is abundance. Exposure, brutal thrashings, violent assaults, are common incidents, fresh examples of which may be daily authenticated. One day last week a powerfully-built labourer came home for his evening meal and, apparently by way of mere diversion, occupied the interval of its preparation in pounding to a swollen mass of bruises the face of an infant child in the same room with him. Except in some of its less important details this case is no isolated one. By far the greater number of reported cruelties, however, may be best classified under the term "neglect." A typical illustration is furnished by another case in which the six children of a drunken couple were discovered in a house of two small rooms, swarming with vermin, filthy, and ill-nourished, and one of them suffering from hip-disease. On a perusal of such facts we are tempted—almost impelled—to question their accuracy, and to inquire how it is that, if genuine, they have so long escaped observation. The reply is not difficult. The cruel excesses cannot certainly be regarded as the product of our age or of our country alone. Our better acquaintance with them is probably to be attributed as much to the success with which they have been exposed by recent legislation as to any sudden decline in parental virtue. Be this as it may, the duty of repression which their prevalence enforces upon us cannot be disregarded, and it is absolutely essential that this must extinguish all considerations of parental authority or personal freedom—to do wrong. This is a matter in regard to which, if we judge by the frequent lenity—we might say the levity—of sentences passed on such cases, even magistrates are not duly careful. A case is brought up and almost summarily dismissed, or the penalty inflicted is in relation to the offence ridiculously mild. The ruffian whose brutality we have already mentioned was gently reminded of his fault by receiving a sentence of two weeks' hard labour, to which no doubt he was well accustomed. No wonder that he laughed at the prospect of so mild an expiation. We must admit, moreover, that the mere infliction of terms of imprisonment in many such cases appears to us to be quite inadequate to the requirements of justice. A nearer approach to equality in suffering between the victim and its tyrant is most desirable, and there is surely reason to expect that the remedial effect obtained by corporal punishment in the treatment of garotting might likewise be expected in dealing with the equally, or even more, scandalous wrongs inflicted on children. This method may not indeed be adapted to every offence of the kind, but it is in our opinion admirably suited to many cases in which personal violence plays a part. In any case we trust that no tenderness for domestic rights or personal liberties, both equally forfeited by abuse, will deter the officers of law, in whatever sphere, from using to the full the powers granted them by the recent Act for the Protection of Children and the punishment of their cowardly oppressors.

HOSPITAL ACCOMMODATION AT SEA.

IN his annual report for the year 1893 Mr. Wellesley Harris, medical officer of health to the Southampton port sanitary authority, refers to the very important subject of hospital accommodation on board mail steamers. He points out that it would be to the interest both of the shipping companies and of the public if better accommodation for the isolation of cases of infectious disease were provided. It will certainly come as a somewhat unpleasant surprise to persons accustomed to travel by sea to hear that some of the larger mail steamers trading to and from the port of Southampton have the hospital immediately contiguous to the quarters of the third-class passengers and the stewards. As an instance of the risk which this condition of affairs gives rise to, Mr. Harris mentions that a case of small-pox was recently removed from a ship where it had been treated in a cabin under the fore hatch and adjoining the quarters of eleven stewards and a provision store-room. This certainly was a somewhat alarming situation for any unvaccinated or badly vaccinated passengers to be placed in, and we trust there was on board a surgeon with a good supply of lymph. Mr. Harris expresses the opinion that it should be made compulsory for the hospitals of all passenger ships to be on the upper deck and as far aft as possible. We are very glad to see that Mr. Harris has referred to this subject, as it is evidently one which requires looking into, not only on account of the risk of infection to passengers as a whole, but as affecting very materially the chances of recovery of patients on board ship. There arises a further question as to whether hospital accommodation at sea, in addition to being badly placed, is not also sometimes inadequate, and whether such inadequacy may not be detrimental to the chances of recovery of steerage passengers who, in the event of the hospital being full, would have to be treated in their none too capacious or well lighted cabins. It is obviously impossible to obtain a ship's hospital far removed from all

inhabited portions of a vessel, but Mr. Harris's suggestion of insisting on the hospitals being placed well aft would tend to prevent the infected air passing over other parts of the vessel. Unfortunately the destruction of all infected matter contained in the outgoing air of hospitals has not yet reached such a stage as to render its application to ships' hospitals practicable.

"VACCINIA AND VARIOLA."

IN our leading article under the above title which appeared in THE LANCET of Sept. 29th reference was made to the work of Dr. Klein and Dr. S. Monckton Copeman in the bacteriology of these diseases. We stated that Dr. Klein had found a definite bacillus containing spore-like bodies to be present in both variolous and vaccine lymph, but omitted to mention that Dr. Copeman had also, though quite independently, been able to demonstrate the presence of a similar and apparently identical bacillus. An abstract of Dr. Copeman's paper, which was read before the Pathological Section of the British Medical Association at Bristol, and which gave the details of his discovery, appeared in THE LANCET of Aug. 4th. We recall it to our readers' attention in justice to Dr. Copeman, and because of the corroboration of Dr. Klein's work on this point which is thus independently afforded.

SIR WALTER FOSTER ON THRIFT.

WE were glad to see that, in his speech at the opening of the Exhibition of Coöperative Productions at Derby, Sir Walter Foster expressed regret that at the Trade Union Congress some of the delegates had spoken disparagingly of the habit of thrift. Sir Walter Foster's regret will be shared by all friends of coöperation and of the working man. The regret will be the greater when it is remembered that the disparagement of thrift came from Mr. John Burns, who spoke as if thrift were, if not satanic in its origin, the invention of bad men. We should have thought that so sensible a man as Mr. Burns was under no delusion as to the need of thrift in any family and in society under any conditions. Even if the country were one huge Trades Union securing its members a short day's work and a large wage, apart from thrift, its members would arrive at the end of their life journey paupers and not free men. Sir Walter Foster evidently knows more about human nature than does Mr. John Burns.

CARE IN THE USE OF POISONS.

IN an annotation in THE LANCET of Sept. 22nd we drew attention to a series of eight cases of poisoning by carbolic acid and expressed our belief that further accidents would follow unless something were quickly done, a belief justified by the case commented upon in our last issue. On both these occasions we emphasised the necessity of proper care being taken to guard against accident, and suggested that bottles containing poison should possess some distinguishing mark. In THE LANCET of Aug. 18th mention is made of two devices for this purpose, and a new form of poison bottle is noticed in another part of our present issue. All the ingenuity of inventors, however, will not avail unless intelligent thought is used when dealing with poisonous substances, and this fact has been strongly emphasised at two recent inquests. On the 20th ult. at Oxford an inquest was held on the body of a retired farmer who, in the dark, drank by mistake from a bottle containing carbolic acid. In this case all reasonable precautions would seem to have been taken for keeping the acid; the bottle was of blue ribbed glass, was fitted with a patent stopper, and as an additional protection was usually kept in a case. Notwithstanding these precautions, however, the deceased entered a dark kitchen and drank from the bottle. The second case, which occurred at Deptford, is a painful one, and still more forcibly shows the necessity for thought in all cases where poisons are being dealt with. The mother of a female child aged eight months suffering from bronchitis visited the surgery of a medical man and procured a mixture, which was administered to the infant upon her return home. The child died the same night. At the inquest the medical attendant stated that when the mother called he was mixing in a large graduated jar, usually kept for water, a lotion consisting of acetate of morphia. He placed the glass on the counter and filled a bottle with the necessary drugs for the child's mixture, mechanically taking up the glass containing the morphia to fill the bottle. Almost immediately after the woman had left the surgery the mistake was discovered, but not soon enough to save the child's life. Both these cases illustrate our contention that in spite of all mechanical precautions accidents will arise if proper care is not taken and intelligent thought used when dealing with poisons—indeed, the presence of mechanical safeguards is apt in some cases to give a sense of false security. The danger of mechanical action taking the place of thought is aptly illustrated in the painful case at Deptford and suggests the advisability of keeping vessels used for mixing poisons distinct from those containing non-poisonous substances.

THE WATERS OF BOURBOULE.

DR. HEULZ, of Bourboule, and M. Cathelineau, of the laboratory of the Hôpital Saint Louis, have recently published a fresh study of the physiological and therapeutical action of the waters of the well-known resort in the Puy-de-Dôme. These waters are highly mineralised, the chief ingredients being chloride and bicarbonate of sodium, chloride of lithium, chloride of potash, lime, iron, and arsenic, with a considerable quantity of free carbonic acid. The arsenic, to which local authorities attach special importance, is in the form of arseniate of soda, the amount being 28 milligrammes per litre. The temperature of the different springs varies. The Perrière-Choussy spring has a temperature of 56·5° C. at the surface and 60·1° C. in its deepest parts, while other springs have temperatures varying from 49·5° to 19·1° C. The waters are taken internally and are also used for baths, douches, and inhalations. There are special rooms for the administration of the waters as gargles, nasal irrigations, sprays, &c. We are informed, not unnecessarily, that "les appareils d'irrigation pulvérisation et humage sont minutieusement lavés avec un liquide antiseptique après le départ de chaque malade." Some authorities, such as Durand-Fardel, place the Bourboule waters among the class of "eaux chlorurées bicarbonatées," while others, as the present writers, prefer to regard them as essentially arsenical waters. The chief points in the physiological action of these waters are said to be the following: The appetite is stimulated, the circulation is not materially affected, respiration is facilitated, the nervous system is not influenced in any fixed or constant manner. The effect of the Bourboule waters on the urine would seem to vary according as they are administered as baths or internally. In the former case, we are informed all the elements of the urine are excreted more freely, with the exception of phosphoric acid, while in the latter case all the elements of the urine are excreted less freely, with the exception of chlorides and uric acid. The general influence of the waters is thus summed up: (1) They should be administered in the form of baths in cases in which there is a failure of nutrition, as in lymphatic, scrofulous, and anæmic patients, and also where there is a tendency to the formation of fibrous tissue; (2) the waters may be given internally in tuberculous and diabetic cases, in bone disease, and in nervous exhaustion. It was in the treatment

of "lymphatisme"—the term so dear to our French *confrères*—and tuberculosis that the waters of Bourboule gained their earliest reputation. Tuberculous affections of the skin, bones, and joints are said to do well at Bourboule. Lupus is said often to benefit by the treatment. That other malady so prominent in French medical literature—viz., "arthritisme"—shares with "lymphatisme" the place of honour in the list of cures effected at Bourboule. We confess these general terms are to us somewhat confusing. We are unable to attach any very definite meaning to the term "lymphatisme" or the "lymphatic temperament," and, instead of using a convenient generic expression such as "arthritisme," we think it better to define whether we mean gout, rheumatism, or osteo-arthritis. The work on which these observations are founded is, on the whole, a careful and scientific study of the action of an important class of mineral waters upon the human organism.

DEBRETT'S PEERAGE AND IMPATIENT MEDICAL SPECIALISTS.

WE have had frequent occasion of late to notice indications of impatience on the part of certain members of the profession who credit themselves with large special gifts that differentiate them in their estimation from their brethren, and, according to some representations, make them the only safe persons to be consulted. Another very striking illustration of this intolerable evil is in the following circumstances. The publishers of Debrett's Peerage state that they have been requested by several eminent medical specialists to prepare a reference book of medical men in similar style to Debrett's Peerage &c. It would seem that practitioners who cannot await selection by the profession and the public on their own merits wish for advertisement in a book with a fancy binding. A well-known member of the profession who has received this flattering circular from Messrs. Debrett has submitted it to our notice. We are sorry Messrs. Debrett should so misjudge the interests of the public and the profession as to cater to such unprofessional and inordinate vanity. We venture to think that even yet they will reconsider their duty to the profession, and the public, and for that matter the peerage, and will realise the fact that those who are most keen to see themselves in the special consulting-room edition of the volume bound in maroon are the persons whom it would be most responsible in them to appear to recommend to the public. In any case, the profession will form its own estimate of the gentlemen who so far forget their obligation to the profession as to appear in such a list.

THE YENG WAH HOSPITAL, PERAK.

WE have received from Mr. S. C. G. Fox the report of the Yeng Wah Hospital, Taiping, Perak, for 1893, which contains more than one interesting observation. In particular, Mr. Fox's inquiries upon the subject of opium-smoking are useful and instructive. "During the past year," he records, "I have continued my inquiries among the patients of the Yeng Wah on the prevalence of opium-smoking; the figures are not quite so reliable as they might be—the difficulty of obtaining satisfactory information from a coolie Chinaman is very great. A man who has smoked for five years and only left off for the last fortnight will unhesitatingly state, when asked, that he is not an opium-smoker; others will say that they smoke when they are ill only, or during holiday time, and then leave off for months, so that the classification of these men is difficult. It may be taken as a general rule that every Chinaman who suffers from any chronic and painful disease is an opium-smoker, and the extent of his suffering can be measured by the amount of opium he smokes. One of the most striking defects in the evidence brought forward in India on the Opium Commission is the absence of any figures; statistics, as far as I am aware, were not in one single case brought forward, either for or against the opium habit. These figures are taken from the hospital returns during 1893 and part of 1892. Intermittent fever: opium-smokers, 245; non-opium-smokers, 249; remittent fever: opium-smokers, 4; non-opium-smokers, 9; malarial cachexia: opium-smokers, 29; non-opium-smokers, 21; making a total of opium-smokers 278, as against 279 non-opium-smokers. From the above figures no protective influence against malaria can be claimed by the opium-smoker." Mr. Fox adds that out of 5346 patients admitted into hospital during part of 1892 and 1893, 3055 were opium-smokers, and 2301 were not addicted to this habit. The mortality was: opium-smokers, 500; non-opium-smokers, 237. At first sight it would appear that the death-rate among opium-smokers was very high, and might fairly be attributed to this habit; but this is not the case, for directly a Chinaman becomes ill he takes to smoking opium. Therefore, in hospital returns a large proportion of the patients are seen to take opium, and the mortality must in consequence be high, and gives the opium returns a false appearance. It would seem, however, that non-opium-smokers, according to Mr. Fox's records, are more liable to attacks from beri-beri. The numbers are too small for arbitrary conclusions; but 74 opium-smokers were admitted for beri-beri, as against 137 non-opium-smokers.

AN ACTION FOR FEES AT DUNDEE.

THE Dundee Magistrates' Small Debt Court have come to a very sensible decision in regard to the claim of Dr. Robert Miller against Dr. Charles Moon for £1 1*s.* in payment of professional attendances at two confinement cases. We gather from the *Dundee Advertiser's* report that Dr. Miller attended for Dr. Moon, and that the fee, or part fee, in dispute had never been paid by the patient to Dr. Moon. Dr. Miller had been sent for to attend, though Dr. Moon, at an earlier hour of the day, had seen the patient. Some understanding would seem to have existed between these gentlemen as to attending for each other. The patient tendered the fee in one case to Dr. Miller, but he refused to accept it. Evidence was adduced as to the ordinary amenities of practice between medical men when the practitioner engaged could not attend. Dr. J. W. Miller stated them very well. He said it was a constant practice among medical men to do each other's work for nothing, except in confinement cases. Even here the fee was often not claimed, but the most general rule was division. In no case was division looked for till the patient paid. In a few cases the whole fee was paid. He would never dream of demanding the fee. The bench were unanimously of opinion that there was no case of employment on behalf of the defender, Dr. Moon, and that, therefore, "absolvitur" should be given. It is regrettable that such an obvious question should have been taken into court. The common sense and courtesy of the profession alike demand the private settlement of such disputes.

THE DIAGNOSIS OF LATENT ANEURYSM.

IN the earlier stages of most cases of aneurysm of the aorta there is an absence of dulness on percussion, of pulsation, and of aneurysmal bruit, and it is only later that the recognised signs are apparent. In certain cases the physical signs remain latent for an indefinite period, and it is only through the occurrence of the pressure symptoms that a suspicion of such a condition will arise. Even then there may be no positive diagnosis, as other thoracic tumours may produce the same disturbing symptoms. Dr. William C. Glasgow, in a recent number of the *New York Medical Journal*, believes that he has recognised a sign which will corroborate the diagnosis, and which will enable a positive opinion to be formed in such cases. The sign to which

he makes reference is the presence of a systolic sound or thud in the brachial artery, synchronous with the systole of the heart, and sometimes accompanied by an arterial murmur. It may also be heard in connexion with the aneurysmal tumour which has been conducted through the artery. When this sound can be heard and aortic regurgitation can be excluded, Dr. Glasgow claims that a positive diagnosis of aneurysm can be made even in the absence of all other signs or symptoms. It may be mentioned that Skoda in 1869 drew attention to this brachial sound as one of the most significant signs of aortic regurgitation.

THE QUEEN'S JUBILEE HOSPITAL.

THE position of this institution is undoubted. Until the financial relations between what purports to be a charity and Mr. R Fitzroy Benham are made perfectly clear no more subscriptions should be sent. We emphasise this point, because a recent circular has been issued to the public, dated Sept. 20th, asking for immediate funds to carry on a great work. With Mr. Benham's private position we have nothing to do. If he is able to contradict the editor of *Truth's* distinct charges and detailed assertions he should do so without delay.

NEGLECT IN RIVER NAVIGATION.

LITTLE sympathy will accompany the sentence passed recently upon the owner of a river steamer for having allowed his vessel to be navigated by an unlicensed person. The case, moreover, was aggravated by attendant circumstances. The second officer was unlicensed, and the duty of having a look-out on board was neglected. The dangers and anxieties which belong to river navigation are known to most of us. They are not so trifling that they may be disregarded by the most experienced of river captains. Nor would we readily believe that they are thus overlooked by men of this stamp. Even when due care is exercised a collision is at times barely avoidable on some of our waterways, crowded as they are with craft of different sizes and types, from the canoe to the river steamer. The wonder is that accidents are not more numerous, and this fact is doubtless largely attributable to such forethought as was conspicuously absent in the case we have mentioned. The history of this latter, it is to be hoped, will help to stimulate the zeal of steamboat owners, of their officers, and also of the riparian police, to ensure efficiency in navigation.

POOR-LAW CONFERENCE AT SOUTHPORT.

AT the twentieth annual Conference of the guardians of the poor in the North-Western Poor-law district, held last week in Southport, the subject of adequate provision for the poor was treated in its various aspects by many members who have had experience regarding the Poor-law system of this country. The chairman, Sir John T. Hibbert, M.P., said that he did not think the increase of pauperism as a whole was of serious import. In Lancashire and Yorkshire the proportion did not reach two per cent. The most important question from a medical point of view before the Conference was that of nursing in workhouse hospitals, and this was very well dealt with by Dr. Rhodes of Chorlton Union, who commented on the fact that the public ought to be in a position to obtain knowledge in regard to the mode in which those who occupied the workhouses were treated. From being prisons these institutions have now become hospitals, almshouses, and schools, a condition of improvement which THE LANCET, we may remark, has had no slight share in bringing about. Dr. Rhodes pointed to the excellent nature of the workhouse infirmaries as a field for medical education and pleaded for the admission of senior medical students into the large hospitals. This suggestion is also of old standing. It was in 1868 that the proposal was first made to open the doors of these State hospitals to medical students for the purpose of instruction and actually embodied in a clause in Gathorne Hardy's Act, which afterwards became law. This particular clause, however, was repealed by its opponents in the year after its embodiment. The omission of the clause, practically closing these institutions to medical students, forms one of the most apparent weaknesses in the Act. Dr. Rhodes spoke the opinion of all who have knowledge of the methods of medical education when he said that the admission of students would actually benefit the patients by helping to break the miserable monotony of the workhouse infirmaries. It would do more, it would ensure regularity of attention and accurate and careful watching, both as regards the methods of nursing and general treatment. There are more beds in the workhouse infirmaries of London alone than in all the voluntary and endowed hospitals of the United Kingdom. These afford a wide field for medical education, and especially for the observation of such cases as are most likely to be brought under the notice of general practitioners. In these infirmaries the methods of the best hospitals are now adopted. We wish the same thing could be said for workhouse infirmaries in general.

ALLEGED FATAL CASE OF DIRECT INFECTION BY THE CHOLERA BACILLUS.

A STATEMENT has appeared in more than one of our lay contemporaries of the death from Asiatic cholera of Dr. Oertel (who must not be confounded with the distinguished Jena professor), of the Hygienic Institute at Hamburg, whilst engaged in bacteriological investigations of specimens of infected water from the Vistula. It is said that he succeeded in making cultures of the cholera bacilli from this water, and in one account it is circumstantially related how he introduced into his mouth a minute portion of the cultures, and, although recognising the gravity of the accident and resorting to the free use of germicides, he developed symptoms of the disease, which rapidly proved fatal. If substantiated, this sad occurrence not only adds one more to the list of fatalities amongst experimental investigators, but would form a verification of the value of Koch's discovery; for, although more than one experimenter has ventured to swallow these bacilli with impunity, their negative results cannot weigh against a clearly proved positive one. It is, of course, quite as likely that the disease was contracted in another way, and that the case affords another of the numerous coincidences in which medical history abounds.

THE PORT SANITARY AUTHORITY OF LONDON.

THE report which Dr. Collingridge has just presented dealing with the work of the port sanitary authority of London for the past half-year affords abundant proof of the energy which that body displays in carrying out its work. The number of vessels visited by the sanitary inspectors during the half-year dealt with by the report shows an increase of 600 over those visited during the previous period, the total number amounting to 12,018, of which not quite 2000 were of other than British nationality. Structural alterations were enforced on 276 ships, and 417 were found to necessitate a large amount of cleansing. In conjunction with the officers of customs, 4807 vessels arriving in the Thames from foreign ports were medically inspected, the individual examinations amounting to 12 514. Dr. Collingridge insists upon the absolute necessity of a medical man visiting every incoming vessel from a foreign port, and maintains that no system will be safe or afford reasonable protection unless this is done. The medical man alone

should be the judge as to the health of a vessel, and in the event of a false answer being given by the master of a vessel a legal penalty should be imposed upon him. The report also deals with the befouling of the Thames, a growing nuisance caused by the passage up and down the river of offensive cargoes. Dr. Collingridge suggests the framing of by-laws dealing with the matter, which he considers as threatening to the public health. During the period dealt with in the report 2328 carcases of mutton, 16,314 cases of fruit, and 81 cases of eggs were seized. In connexion with Dr. Collingridge's remarks respecting the medical inspection of ships it is worthy of note that at the recent Conference of Medical Officers of Health at Liverpool a resolution was adopted recommending that the health inspection of ships should be handed over to the local authority, who should be required to supply the necessary medical staff. The officers of customs would thus be relieved from a heavy responsibility, for which they have no adequate machinery. The port sanitary authority of London, acting under the advice of Dr. Collingridge, have, in conjunction with Her Majesty's Customs, instituted a simple system of medical inspection which has been in force for two years and has worked well without the slightest unnecessary delay or hindrance to the trade of the port—a very important point.

THE ORIGIN OF "SPRUE."

SURGEON-CAPTAIN DYSON, while officiating for the Sanitary Commissioner of Bengal, has arrived at the conclusion, as the result of his investigations at Darjeeling, that hill diarrhœa is attributable to the mechanical irritation set up by small particles of mica in the water, which cannot be dissolved by any of the acids contained in the gastric juices. The *Times of India* adds that it thinks this explanation consistent with the symptoms of the disease, and that it may in all probability be accepted as the true one. Although it is, no doubt, true that minute particles of mica are found in the drinking-water at Darjeeling, and that their presence may cause irritation and give rise to disease or diarrhœa, we can hardly believe that this explanation will apply to all the cases of this form of diarrhœa met with at different stations in India and in China, the Straits Settlements, and elsewhere. The disease has too wide a range of prevalence, its symptoms are too definite, and it continues too long after the subjects of it have left the places and climates where they contracted the disease for it to be accounted for in this way. It is not uncommon for persons on first arriving on the hills from the plains of India, to suffer from diarrhœa and to recover without leaving their station; and it sometimes happens that others who have not been on the hills are attacked with a very similar if not identical complaint, and occasionally the symptoms of the disorder in question do not manifest themselves until after individuals have returned to this country. It can scarcely be that the geography of "sprue" is everywhere conterminous with the presence of mica.

THE PASTEUR INSTITUTE AT NAPLES.

ITALY has more than one institution for the Pasteur treatment of rabies. Among these, that at Milan has deservedly a high place. According to Dr. Segré's recent report it can claim a lower percentage of mortality than any similar institution of the kind on the Continent, but its young compeer at Naples is already running it hard. Established in 1866 by the illustrious Arnaldo Cantani of the Neapolitan medical school, and since his death last year directed by Professor Cardarelli, of the same seat of learning, it has rapidly justified the expectations formed of it, its report now before us being hardly inferior to Dr. Segré's as a record of work achieved. It takes in the period from August, 1886, to April, 1894, and it deals with over 1000 cases subjected to the Pasteur treatment. Its editors (Drs. Calabrese and Germano) divide the patients into classes, one of which is constituted by 291 cases certified to have been bitten by rabid dogs or other animals whose rabies was proved by every pathological test. Another and a more numerous class—486 in number—consists of patients whose bites were from animals admitted to be rabid when in life, but of which no post-mortem examination was practicable. A third class included those in whose case the bites were from suspected animals only. The general mortality among the patients (over 1000 as stated) was 0·8 per cent., while the mortality among those bittten by dogs proved pathologically to be mad was 0·8 per cent. The experience of Drs. Calabrese and Germano, like that of most practitioners in the same department, was that the male cases outnumber the female, and that the adult is less often bitten than the child. Another interesting deduction from their statistics is this—that the more numerous the bites on a patient and the more various the parts bitten the more likely it is that the animal is rabid. As to cauterisation, they would subscribe to Dr. Segré's opinion that the actual cautery is the best of all such forms of treatment; that if practised promptly (that is, within half an hour of the bite) it is not without value; but that it must be liberal—that is to say, deep and comprehensive. After half an hour, and not practised to the sufficient extent vertically or superficially, it is useless, or worse. But the Pasteur cure remains without a rival, as not only perfectly innocuous in itself, but successful in the vast majority of cases. True, it does not pretend to save all hydrophobic cases any more than quinine cures all malarias, or salicylate of soda all rheumatisms, or mercury all cases of syphilis. But its effect in minimising the mortality from hydrophobia is incontestable, and it may be so far perfected as to be efficacious with hardly an exception. For the improvement of its procedure and the training of its practitioners a liberal support of the institutes devoted to it is imperative. That at Naples, we learn, is subsidised by the Banca di Napoli and by a very few South Italian provinces. But these subsidies should be multiplied if it is to improve on the record—a conspicuously satisfactory one—contained in the report of Drs. Calabrese and Germano.

MINERAL TEA.

OF late years the public have been favoured with wonderful revelations in regard to tea. We may safely say that no article of diet has been subject to equal variations in cost, and without doubt the advantage has been largely on the side of the purchaser. As usual, however, the vices which wait upon prosperity have not been wanting among the temptations of the tea-salesman. Where cheapness brought trade, and the popular palate was not critical, the rewards of excessive thrift proved more attractive than the cultivation of the æsthetic principle, and as a consequence the cheap tea has become cheaper and still cheaper, till the sixpenny pound of "tea" dust has virtually lost all flavour and all reputation save that of being economical. Our readers will have noticed a statement lately published respecting the composition of this precious powder, something like a seventh part of which (13½ per cent.) consisted of mineral matter; the rest—warehoused for two years—of what? The purchaser, it will be remembered, recognised the worthlessness of his purchase, and recovered most of his outlay upon it, though what else than absolute rubbish he can have expected to purchase at the price it would probably be difficult to explain. No doubt the public, which is the ultimate purchaser—and, shall we add, sufferer—will note the incident and be willing in future to spend somewhat more freely on a genuine and never expensive commodity. Truly,

beggars must not be choosers; but let no fastidious beggar seek refreshment in the form of tea in such convenient halting-places as Salvation Army shelters. A tea one-seventh of which is mineral, and half of this, moreover, siliceous, cannot be very refreshing, and, if persisted in, might even prove injurious.

ST. BARTHOLOMEW'S HOSPITAL.

As misconception may arise with regard to the recent appointment of an ophthalmic surgeon to St. Bartholomew's Hospital, which was rendered necessary by the resignation of Mr. Henry Power, we may point out that Mr. Bowater Vernon becomes Senior Ophthalmic Surgeon and Lecturer on Ophthalmic Medicine and Surgery, and Mr. Walter H. Jessop has been appointed to the posts of Ophthalmic Surgeon and Demonstrator of Diseases of the Eye. Thus Mr. Vernon succeeds to Mr. Power's place on the staff, and Mr. Jessop fills the post which has consequently been vacated by Mr. Vernon.

DIPHTHERIA IN THE LONDON DISTRICT.

SOME unnecessary alarm has been occasioned by the spread of the report of a recent diphtheria outbreak of a serious nature. Inquiries at the Metropolitan Asylums Board offices, and a comparison of the statistics with those of past years, indicate no new outbreak of any marked character. Diphtheria is, more or less, always present in the metropolis; but the seven hospitals and convalescent homes belonging to this Board have generally provided the accommodation required for those cases and also for those wrongly certified to be cases of diphtheria. On Thursday, Oct. 4th, there were 430 cases in the hospitals, leaving forty vacant beds. The difficulty of ascertaining the diagnosis of this disease may be estimated from the fact that of 3099 cases certified as diphtheria last year about 251 cases were sent in wrongly certified as diphtheria, but subsequently treated for a different disease. Since 1870, however, diphtheria has been steadily gaining ground. The proportion in 1870 was 0·10 per 1000 of estimated population. In 1880 it was 0·14, in 1890 it was 0·33, and last year 0·76 per 1000. There are many causes to account for the gradual increase of the figures. It is, however, noteworthy that the mortality in the Asylums Board Hospitals from this disease was 59·35 per cent. in 1888, the first year in which cases were admitted into the hospitals of this Board; in 1893 the death-rate in these hospitals was 29·35 per cent., and last year 30·42 per cent. An increase in frequency and a decrease in mortality seem to be a reasonable deduction from these figures. The figures for the present year are not yet available.

THE NEW TREATMENT OF TUBERCULOSIS.

THE announcement of a new and certain method of treating the various forms of tuberculosis naturally excites the greatest interest in the medical profession, as well as the wildest hopes amongst unfortunate sufferers. It is, therefore, well that all new claims should be submitted to the closest criticism at the earliest opportunity. The caution displayed in the paper by Dr. Arthur Gamgee (*vide* p. 811) upon Dr. Viquerat's treatment of tuberculosis will not fail to check any great burst of enthusiasm, while it is to be hoped that the progress of further investigations will not be arrested by his expression of belief that the claims have been put forward quite prematurely. The theory of the new treatment is certainly attractive. It is based upon the work of Behring and Kitasato with the serum of immune animals, and the problem first confronted was the difficulty of finding domestic animals which do not become tuberculous under normal conditions. The question of the supposed immunity of the ass and the mule is full of interest, and Dr. Gamgee's criticisms of the results claimed after the injection of active cultures of the tubercle bacillus appear to be based upon sound reasoning, guided by a healthy scepticism reluctant to accept new and startling statements without full proof. It is possible that Dr. Viquerat's method may ultimately prove to be of great value, but it is certain that much harm is done to the medical profession, as well as to the public, by premature claims to the knowledge of infallible remedies. Such claims savour so largely of the phraseology commonly associated with the introduction of new drugs that they are apt to defeat their own object, and to repel, rather than to attract, dispassionate investigation. Science can only be advanced by healthy scepticism which is prepared to test and verify; it cannot fail to be retarded if such labours appear to be futile owing to premature dogmatic assertions based upon insufficient experimental data. We are glad to have been able to put before our readers both a representation of the claims of Dr. Viquerat and Dr. Gamgee's wise and temperate criticism.

THE DIFFUSION OF SMALL-POX.

THE news concerning the diffusion of small-pox last week points to a localisation of three or four prevalences, the chief being London, Birmingham and its neighbourhood, Liverpool, and Dublin. In the metropolis there was only one death registered from the disease, and but 10 admissions to the Metropolitan Asylums Board Hospitals. Saturday found 103 cases in their institutions, and not half a dozen in the Highgate Small-pox Hospital. The parishes contributing cases last week were widely distributed—namely, Marylebone, Paddington, Fulham, Kensington, and Woolwich. On Friday there was a clean sheet, and only on one day were the admissions as high as 3. In the Midlands, Birmingham had 2 deaths and 37 fresh cases, and Wolverhampton, with other adjacent towns, had attacks. At Liverpool the medical officer of health reported to the health committee on Thursday of last week that there were 52 small-pox patients in hospital, all coming from one locality, Toxteth-park, the cases occurring numerously among the unvaccinated. In two streets in the affected district as many as 118 unvaccinated persons were found to be resident. The fresh attacks last week numbered upwards of 20. A few cases are reported from towns in Yorkshire and still further north. In Dublin the disease is now chiefly located south of the River Liffey, mostly in the more crowded parts of the old Liberties, but the cases are not numerous.

MR. THOMAS BRYANT is to deliver the first lecture of the session of the Hunterian Society at the London Institution, Finsbury-circus, on Wednesday next, Oct. 10th, at 8.30 P.M., on "Some Subjects of Public and Professional Interests." The lecture, which is open to the attendance of all members of the profession, will continue and amplify an address recently delivered by Mr. Bryant.

THE 121st session of the Medical Society of London will commence on Monday next, the 8th inst., when the President, Sir William B. Dalby, will deliver an address on the Pleasures of Medicine and Surgery.

THE Harveian Oration will be delivered by Dr. T. Lauder Brunton, F.R.S., on Thursday afternoon, Oct. 18th, at 4 P.M., at the Royal College of Physicians, Pall Mall East.

ANTWERP EXHIBITION.—The Apollinaris Natural Mineral Water Company have received the *diplôme d'honneur* of the Exhibition.

DR. VIQUERAT'S TREATMENT OF TUBERCULOSIS.

BY ARTHUR GAMGEE, M.D. EDIN., F.R.S.

THE sensational paragraphs which have appeared in various continental journals, and which have been copied into the English papers, announcing the startling discovery of a new and certain method of treating phthisis and other tuberculous affections induced me to telegraph on Tuesday, Sept. 19th, to Dr. Viquerat of Moudon, asking him whether he would be at home on the following day, as I wished to see him in reference to his treatment of tuberculosis. Receiving an affirmative reply, I left Lausanne by the 5.30 A.M. train and shortly after 7 A.M. reached Moudon, a quaint mediæval little town, once the capital of the Canton de Vaud. I was received by Dr. Viquerat with the greatest courtesy, and in my interview with him, which lasted until mid-day, he manifested the greatest readiness to acquaint me with his method and frankly replied to every question which I put to him.

In the criticisms which I shall feel called upon to make, and the warning which I shall feel compelled to address, I must neither be understood to impugn Dr. Viquerat's good faith and veracity, nor to cast a slur upon his scientific capacity and his professional devotion. It will, however, be my duty to draw attention to the weak links in the chain of evidence which Dr. Viquerat adduces, and to show, as I think, conclusively, that his method of treatment is yet in the strictly experimental, or rather tentative, stage, and that the evidence in its support is insufficient to justifiy the confident anticipations which have been indulged in. Instead of building castles in the air only destined to be dissipated, let the friends of phthisical patients in England await the calm judgment of those able to form a sound opinion when the necessary experimental and clinical evidence shall have been laid before them and the means afforded of adequately controlling Dr. Viquerat's assertions. The experience of the error into which so great an observer as Koch fell, and the fact (which I am bound to refer to) that Dr. Viquerat's enthusiastic nature has led him, on one occasion at least, to announce a therapeutical discovery which has disappointed all expectations, not only justify but compel caution. Dr. Viquerat may rest assured that neither praise nor gratitude nor honours will be grudged him if he prove successful in his struggle with that disease which surpasses all others in the victims which it claims; on the other hand, in the interests of humanity, the leaders of scientific medicine have a right to claim that they shall be allowed to examine the minutest details of alleged medical discoveries before these are submitted to the popular suffrage. The statements in this article which relate to the details of Dr. Viquerat's method of treatment and to his opinions are derived in part from a pamphlet lately published by him,[1] in part from a report[2] dated Sept. 3rd, 1894, signed with the initials "G. P.," and of which the writer is a young medical man until recently a student in the University of Geneva, but mainly from information directly communicated to me by Dr. Viquerat in my interview of Sept. 20th.

Dr. Viquerat's method for the treatment of tuberculous diseases is based upon and suggested by principles and general methods which we owe in part to the great Pasteur and in part to two distinguished pupils of Koch, Behring and Kitasato. Pasteur had shown that animals could be rendered immune from the attacks of certain virulent infective diseases, such as chicken-cholera and anthrax, by inoculating them with successively increasing doses of attenuated cultures of the bacteria which occasion them. It was afterwards found that protective immunity could likewise be secured by injecting cultures sterilised by heat or cultures which had been freed from all bacteria by filtration through unglazed earthenware. Such sterilised or filtered cultures owe their immunising properties to soluble chemical substances which are produced by the pathogenic bacteria, and which, when introduced in sufficiently large quantities into the animal organism, induce all the phenomena of the special bacterial disease. Thus immunity against tetanus or against diphtheria can be induced by repeated subcutaneous injections of gradually increasing quantities of the soluble toxic substances which are formed by the tetanus and diphtheria bacilli respectively. It is, however, to Behring and Kitasato that we owe the conception, and the actual method for the treatment, of bacterial diseases by means of the serum of immune animals, and it is they who may be said to have introduced "serum therapeutics." They showed in 1890 that when the blood serum of rabbits which had been rendered immune from tetanus was repeatedly injected subcutaneously into mice these creatures, which are peculiarly susceptible to the tetanus poison, were in their turn rendered immune so as to be ultimately unaffected by the injection of the most virulent cultures of the tetanus bacillus or the strongest solution of its poisonous products. They found, moreover, that the serum of an immunised animal when mixed, outside the body, with a virulent culture or a toxic solution of its soluble products destroyed their power of inducing the phenomena of tetanus. Further, they discovered that the serum of animals rendered immune from tetanus when repeatedly introduced into the body of others already suffering from the disease caused the symptoms to abate and often led to recovery. These beautiful and wonderful discoveries led, in the first instance, to a rational method of treating tetanus as affecting man which, in the hands of Tizzoni, Javel, and others, has enabled them to save many lives which would otherwise have certainly been sacrificed. The same method applied by Behring to diphtheria has led to the treatment of this disease by the serum of horses rendered immune from diphtheria—the treatment which, as carried out by Dr. Roux, the distinguished Chef de Service of the Pasteur Institute in Paris, has reduced the mortality from 63 per cent. of all treated (the proportion of deaths in the cases occurring in a hospital when the old treatment was at the same time being carried out) to 26 per cent., and, as carried out in Berlin, has reduced the mortality from 41 to 15 per cent. of all cases treated (Aronson). If one considers that a large number of the 300 cases treated in Paris and the 274 cases treated in Berlin were in the last stages of the disease, and that in many the gravest complications existed, it cannot b doubted that when the treatment of diphtheria can be undertaken in its early stages the results will be still more remarkable, and that this dreaded disease will, through the beneficent researches of science, have been deprived in great measure of its power of evil.

Inasmuch as pulmonary phthisis and other tuberculous affections are the result of the activity of a pathogenic microorganism, the tubercle bacillus of Koch, it occurred to Dr. Viquerat to employ in this treatment the serum of animals immune from tubercle, and in the first place to endeavour to find some animal easily available to man which possesses a natural immunity from tubercle. It has been shown how *artificial immunity* from the inroads of pathogenic bacteria may be secured, and a few words must now be devoted to *natural immunity*. There exists a natural immunity, relative or absolute, which explains why certain individuals readily fall a prey to specific bacterial diseases, such as the infective and contagious diseases, whilst others escape scatheless who are placed under precisely the same conditions. There are instances of natural immunity possessed by certain of the lower animals which are very remarkable. Thus the common rat possesses *almost* complete natural immunity from anthrax, while the white rat is readily affected by it. In his inquiries Dr. Viquerat discovered that the only domestic animals which under the normal conditions of their existence have never been observed to become tuberculous are the ass and the mule. Even the horse, as the writer learns from a letter received from Dr. Guillebeau, the eminent Professor of Pathology in the Veterinary School of Berne, is so rarely the subject of tuberculous affections as to have been long held to possess a natural immunity from such diseases; its absolute immunity has in recent times been disproved.

In the articles which have appeared on the subject of the Viquerat treatment the statement is made that it consists in the injection of the serum of asses' blood into the body of the person or animal affected, and in the pamphlet published by Dr. Viquerat, as well as in the report already referred to, allusion is only made to asses' serum without any mention of the animal yielding the serum having been subject to inoculation with tubercle. Dr. Viquerat, however, brought before the writer facts which prove that the immunity enjoyed by the ass is not an absolute one, and informed him that, in

[1] Das Heilverfahren der Tuberculose gegründet auf bacteriologisch-experimentelle Studien. Von Dr. Viquerat in Moudon. Erste Auflage. Moudon Buchdruckerei. J. Kretz-Bettemann. 1894.

[2] Rapport sur les Résultats obtenus par M. le Dr. A. Viquerat dans son Traitement de la Tuberculose (Genève, le 3 Sept., 1894). Imp. Romet, Boulevard de Plainpalais, 26.

order to strengthen the natural immunity, he subjects the ass or mule which is to yield the immunising serum to inoculation with cultures of the tubercle bacillus. The ass and the mule, according to Dr. Viquerat, though never becoming subject to tubercle under ordinary conditions and offering a far greater resistance than the horse, do not enjoy an absolute immunity under certain experimental conditions, though he asserts that in the case of these animals the tuberculous affection which is artificially induced *invariably terminates in recovery*. The natural immunity of the animal, he asserts, is reinforced by the temporary disease, so that its blood serum introduced into the body of other animals possesses the power of arresting the progress of tuberculous affections and (if these are uncomplicated) of curing them. The actual process employed by Dr. Viquerat in order to prepare the ass or mule which is to yield the serum for the treatment of tuberculous affections is as follows: 30 c.c. of an active bouillon culture of the tubercle bacillus are injected subcutaneously, and, immediately before or afterwards, 15 c.c. of the same culture are injected into the blood-stream through one of the jugular veins. He asserts that subsequently the ass or mule exhibits no rise in temperature or other symptoms of disease, and that the only objective phenomenon is a remarkably voracious appetite. As the animal, according to Dr. Viquerat, invariably survives, no evidence of any tuberculous infection following the inoculation would be available had he not killed a series of donkeys at varying periods subsequent to the operation. As a result of these observations he asserts that if an ass or mule, treated as above described, be killed between the fifteenth and thirtieth day after inoculation the lungs are found to be pervaded by miliary tubercles which are never surrounded by hyperæmic lung tissue. If the animal be killed between the thirtieth and fortieth day, Dr. Viquerat asserts that the tubercles are found to be disappearing, leaving no trace behind them, whilst after the fortieth day the lungs are always found to have returned to a condition of perfect health. It is from the forty-fifth day, when spontaneous cure has already been more than completed, that the animal is used to supply the curative serum. With this object it is bled, and the blood is allowed to stand over ice so as to allow it to clot and to permit of the separation of serum. To this serum from 0·5 to 0·75 per cent. of carbolic acid is added, and it is then stored in stoppered bottles until required for use. Without wishing to be hypercritical, I must point out that the above statements are of so remarkable and withal of so improbable a character that they cannot be accepted until the most complete and detailed record of each experiment is published, and until the results are confirmed by independent observers. The number of observations would have to be very large in order to establish the fact that the ass or mule is after inoculation into the blood invariably affected by an acute miliary tuberculosis of the lungs—*a miliary tuberculosis always terminating in recovery*. It may very reasonably be objected that, unless the chances of error were minimised by such a number of experiments as the costliness of the animal experimented upon almost precluded, the probability is that the asses which when killed exhibited pulmonary tuberculosis would in the natural course have succumbed, whilst those which when killed exhibited no tubercle had probably remained uninfected.

A further criticism which will suggest itself to all who are conversant with experimental bacteriology is that, whilst Dr. Viquerat has followed up to a certain point the method of Pasteur, of Behring, of Kitasato, and others of inducing immunity against a bacterial disease by inoculation of the bacteria which induce it, his method is altogether exceptional, as he satisfies himself with a single inoculation and furnishes no proof that he has thereby induced *absolute artificial immunity*. But "enough of these pedantic objections" may be the remark of the enthusiast, only too anxious that Dr. Viquerat's predictions should be immediately accepted. "What are the facts on the strength of which Dr. Viquerat relies?" The first and, as it appears to me, the most promising of all the statements which Dr. Viquerat communicated to me was the following: that when the immunised serum of the ass or mule is injected every second day into guinea-pigs which have been fifteen days previously rendered tuberculous by the inoculation of active tubercle cultures the tuberculous glands which had become enlarged and perceptible rapidly become smaller and disappear, whilst the animal, instead of dying fourteen or fifteen weeks after the inoculation, regains perfect health. If the observations made by Dr. Viquerat on this point be accurate, it appears to me that they offer the surest promise that *sooner or later* tuberculous diseases will yield to the treatment by the serum of animals rendered *perfectly immune* in respect of tubercle. But it is on the results which he has obtained in the treatment of tuberculous diseases affecting man that Dr. Viquerat in great part relies. Since February he has treated twenty-five cases, amongst which are many diagnosed as cases of pulmonary phthisis in its earlier and later stages, as well as others representing various forms of surgical disease *alleged to be* of a tuberculous nature, *no proof whatever being given of the fact*. His usual plan is to inject 12 c.c. of the prepared serum every third day. I saw two patients thus injected, and I can vouch for the fact that in neither of these had the numerous injections to which they had previously been subjected led to any local accident—such, for instance, as suppuration.

All the information which is furnished in regard to the twenty-five cases of alleged tuberculous affections treated up to the present time by Dr. Viquerat is contained in the so-called "report," to which allusion has already been made. This "report"[3] furnishes the most unsatisfactory and disappointing evidence which can be adduced in support of Dr. Viquerat's statements, and the amusing tone of authority assumed by its author is no less remarkable than the looseness of nearly every statement which it contains. Before criticising the list of cases given in this so-called report it must be stated that at the foot of the document is printed the following announcement: "Sur la vue de ce rapport médical un Institut vient d'être créé à la Côte-Drize à Genève, dans lequel M. le Dr. Viquerat continue ses travaux de recherche et où une clinique s'ouvrira le Nov. 1er, 1894. Les tuberculeux seront traités à *l'Institut Viquerat* dans l'ordre de leur inscription." Seeing the importance which, according to the paragraph just quoted, appears to have been ascribed to this so-called report, it would have seemed reasonable not to conceal the identity of its author, and to have furnished proofs, which are doubtless forthcoming, that he has now ceased to be *in statu pupillari*, and that his report may therefore be properly termed a medical report. But to return to the twenty-five cases of supposed tuberculous affections referred to in the report. I must point out that no conclusions whatever can be drawn from the results of the treatment of the surgical cases which are diagnosed as tuberculous in character, as no grounds are given which permit of the accuracy of the diagnosis being tested. Hospital surgeons will share the scepticism of the writer in reference to cases reported as follows:—

"*Case 10.*—R., Moudon, multiple cold abscesses, osseous tuberculosis, fistulæ. Improved; still under treatment."

"*Case 11.*—L., Ermanche, tuberculosis of the radius, fistula closed. Pains ceased, improved; still under treatment."

"*Case 12.*—C., Lucens, tuberculosis of the ulna, cold abscess of the neck. Cured."

Turning now to the cases diagnosed as pulmonary phthisis, it is found that they number 15 out of the total 25. Of the phthisical cases 8 are stated to have been in the first and second stages of the disease and 7 in the third stage—i.e., cavities existed in the lungs; in 2 of those 7 cases laryngeal tuberculosis existed. Of the cases in the first and second stages the majority are stated to have recovered, but, inasmuch as in these again no details whatever are given, one is compelled to be sceptical. The value to be attached to a diagnosis of phthisis in the first and even the second stage must depend entirely on knowledge of the skill and habitual accuracy of the physician who has made the diagnosis; great, however, must be the faith of the physician who would accept such notes of a case as the following:—

"*Case 22.*—M. G——, Penay, pulmonary tuberculosis, first and beginning of second stage. Cured."

"*Case 23.*—P., Chesal pulmonary tuberculosis, second stage; improved; still under treatment."

Passing now to the seven cases of phthisis in the third stage—that is to say, in which the disease had progressed to the formation of cavities—one is said to have recovered. The following are the notes of this case:—

"*Case 2.*—M. E. C——, Moulin de Penay; pulmonary tuberculosis, second and third stage; acute form (*forme galopante*). Cured."

Is one to suppose that the cavity or cavities have disappeared in the few months which at most have elapsed since this case was treated, or that by "cured" are

[3] THE LANCET, Sept. 29th, 1894.

understood cessation of morbid symptoms and apparent return to health? Unfortunately, the physician knows that even under such circumstances one dare not speak, after only a few months of respite, of a case of advanced phthisis being *cured*. Excluding this one case, of the remaining six cases of phthisis in the third stage one (No. 9) ceased the treatment and died; one (No. 24) became affected with pulmonary gangrene and stopped the treatment; one (No. 25) has not improved, but is still under treatment; and three are said to have improved somewhat, but to be still under treatment.

The above short analysis of the cases which have as yet been treated by Dr. Viquerat's method justifies the opinion, which I expressed at the commencement of this article, that this method of treatment is yet in a strictly experimental or rather tentative stage, and that the evidence in its support is insufficient to justify the confident anticipations which have been indulged regarding it.

Notwithstanding the criticisms which I have felt compelled to make, I would, in conclusion, state that it appears to me that Dr. Viquerat is engaged in the study of facts which promise to lead to results of the greatest practical value, but only on condition that he does not unwittingly deceive himself and others by supposing that the discovery of the method of curing tuberculous affections is already an accomplished fact.

CHOLERA.

CURRENT NOTES, COMMENTS, AND CRITICISM.

THE season is arriving, if it has not already arrived, when cholera ordinarily ceases to manifest itself with any force, and we accordingly find that accounts of the epidemic, which have regularly appeared during the past few months, are no longer occupying a prominent place in the public journals. Cholera has, of course, occasionally prevailed with much severity during the winter months, still this has not ordinarily been the case either in India or Europe. There is yet, however, much cholera present in Europe—in Russia especially—and it is stated to be prevalent in Constantinople at the present time.

We have endeavoured, in chronicling the history and progress of this epidemic, to keep our readers *au courant* at the same time with contemporary thought and the views which have been advanced in regard to it from various and sometimes opposite standpoints, in order that they should have an opportunity of considering for themselves all the facts, so far as they were known, as well as the way in which they were being read and interpreted by different authorities and observers.

Much still remains to be elucidated before we can be said to have reached anything like finality in regard to the etiology and pathology of cholera and its methods of diffusion. No doubt our knowledge in regard to it has advanced, and something like a practical agreement has been arrived at in respect of its means of spread and as to the best measures that can be adopted to prevent or limit its diffusion. Everybody is agreed, for example, as to the importance of a good water-supply protected from all sources of sewage contamination. But, according to some at any rate, there does not seem to be anything whatever hidden or obscure about the subject. The whole matter has been exhaustively examined and settled, and even the results of the late conference at Paris had been forestalled by one writer in a series of propositions which had been already enunciated in addresses in England and America. This view has, no doubt, the merit of being so clear and simple that all the real and alleged facts have been put in their proper places, and the history of the birth and parentage, the etiology and pathology of cholera are set forth "as clear as noon." Like every story worth the telling, the moral lies on the surface, and it is only the reprehensible and wilful blindness of governments and peoples that causes them to miss it. Succinctly summarised, this view may be represented as follows: Cholera is caused by a specific bacillus, the Gangetic Valley of India being the sole and exclusive manufactory of both the disease and its cause, and to it as a centre every outbreak occurring in every part of the world can be traced; the bacillus is represented as leading two lives—like the double life sometimes depicted by novelists in their characters—one in the human body causing the disease, multiplying within the patient, and poured forth by him in abundance; the other, outside the body, waiting in damp ground, soiled linen, or in dirty water or food, to be swallowed by someone else, and then to start again on its destructive course. This view alleges that pilgrims carry it to their big religious gatherings and festivals, where it gives rise to wholesale water-poisoning; that it is then carried along the lines of human traffic and spread in all directions by the pilgrims to the shrine at Mecca, travelling by steamboat and railway from thence and the Red Sea ports to Egypt and the south of Europe, whilst that which does not go by this direct route proceeds by the older, more indirect, and less rapid one—*viâ* Afghanistan, Persia, and Asiatic and European Russia. Its history from start to finish is, indeed, summed up in a phrase: it is merely a filth disease carried by dirty people to dirty places and, for choice, by dirty water. The cause of cholera cannot be caught through the air, it is not breathed or rubbed into the skin—it can only be swallowed. Notwithstanding that most people discover some elements of truth or probability in this setting forth of "the root of the whole matter," they are not all prepared to swallow it or to accept it altogether as the outcome of latter-day medical science. There will always be some sceptical and critical people ready to declare that it is easy to arrive at apparently logical conclusions when an argument is based upon a series of assumptions, some of which are highly probable or plausible, but none of them absolutely proved, and all that is adverse is ignored as much as if it had never been adduced and had no existence.

We gather from our Anglo-Indian contemporaries that a full inquiry is being carried out by the medical authorities into the recent outbreak of epidemic cholera in Lucknow, to which we have already called attention. Meanwhile some circumstances connected therewith have been published in the *Pioneer Mail* which are of much interest. In the first place, the epidemic, of which the Lucknow outbreak formed part, had a geography of its own; the area over which it extended in July and August was a well-defined one. It is described as a circle whose circumference is represented by the stations of Dinapore, Benares, Allahabad, Lucknow, Cawnpore, and Fategar. The mortality among the native population in this area was very considerable, Cawnpore suffering most. The epidemic stopped to the northwards in the Meerut Division, Meerut escaping, and the Punjab being also very free from cholera this season. In the next place, the outbreak in Lucknow itself, which was an extremely severe one, was almost entirely confined to the East Lancashire regiment, the remainder of the Lucknow garrison—viz., the 16th Lancers, the Royal Artillery, and the Royal Irish regiment—having either escaped altogether or having had a nearly complete immunity from cholera. And, in the last place, the severe outbreak in the East Lancashire regiment is noteworthy in having afforded an object lesson, as it were, in illustration of the caution that has to be observed when dealing with a disease like cholera, about which so much still remains to be known. So far as the results of the experience of the recent cholera outbreak at Lucknow are concerned they certainly seem opposed to the belief that the Haffkine system of inoculation is likely to prove an efficacious method of protection against attack, or to favourably affect a patient's chances of recovery if attacked. From figures available at the time the *Pioneer*

Mail is led to conclude that about an eighth of the total strength of the battalion was inoculated; that about an eighth of the 130 men inoculated were attacked; and that about an eighth of the 95 who died had been inoculated. In view of the spirit and enterprise that animated Professor Haffkine, and of all the ability and labour he has bestowed upon the subject, we sincerely wish that the results had been otherwise. It is right, moreover, to observe that, according to the correspondent of the *Times*, the experience in Lucknow was exceptional, and that more favourable results have been obtained in other places. It may be also pertinent to notice here that there is a communication from Mr. E. H. Hankin in our contemporary of the 12th ult. to the effect that the municipal water-supplies at Cawnpore, Lucknow, and Agra are good, and with regard to the last-named station it is added that it would be a waste of time and money to boil or filter it.

At the late International Congress of Hygiene and Demography at Budapest a paper was read by Dr. Alcide Treille, of Algiers, on African Cholera, descriptive of the cholera epidemic in the province of Constantine in 1893. Dr. Alcide Treille contended that bacteriologists take a narrow and mistaken view of the etiology and pathology of cholera when they attribute all cholera epidemics to the action of one single microbe—viz., that discovered by Professor Koch in Egypt and India. Bacteriology does not, of course, concern itself with the different characters of different epidemics, or the various clinical features of the disease; and he considers that we should not allow ourselves to be altogether carried away by the doctrines of bacteriologists enunciated from the seclusion of their laboratories. He points out that thirty-two species of spirilli were obtained in the laboratory of M. Metchnikoff from the water-supply of Paris and Versailles, and that these were for the most part pathogenetic in regard to animals, and he asks why none of these should be capable of inducing symptoms of cholera in man? In June of last year there occurred in the Sahara, at Tuggurt, 240 kilometres south of Bristera, a cholera epidemic which might perhaps have come from Djerid—that is, further south and to the east of Tunis. This epidemic, he declared, could not possibly have come from the East. There had been no cases of Asiatic cholera since 1867, and the pilgrims from Mecca did not return until the ensuing August, and were quite free from cholera. The disease spread through the Zibaris region, of which Biskra is the principal town, and then passed to various places in the province of Constantine, dying out with the accession of cold weather. The epidemic prevailed among the natives, of whom several thousands died. Although it was undoubtedly cholera, it was not Asiatic cholera, but differed from it in some bacteriological and pathological features, and resembled the disease which prevailed in Algeria in the epidemics of 1860, 1874, and 1885.

Turning, however, to the telegraphic intelligence that has reached this country in regard to the progress of the disease at the present time, we find by the weekly official bulletin issued by the Imperial Board of Health at Berlin on the 26th ult. that there were, from Sept. 17th to the 24th, altogether 47 cases and 9 deaths from cholera in East Prussia, the Vistula region, and the Netze and Warthe District. From the 15th to the 22nd ult. 59 cases and 17 deaths occurred in Upper Silesia and 2 cases in the Rhine province. The latest telegram from Berlin shows that between the 24th ult. and the 1st inst. 24 cases and 6 deaths altogether occurred in East Prussia and the Vistula, Netze and Warthe, and Elbe districts. From the 22nd to the 29th ult. there were 35 cases and 11 deaths in Upper Silesia.

A telegram from Amsterdam on the 1st inst. states that 20 cases and 17 deaths from cholera occurred during the past week in fourteen communes throughout the entire country. Of this number 4 cases and 7 deaths occurred in Amsterdam itself.

THE LEICESTER WATER FAMINE.

WE have received from Mr. Alderman Edward Wood, the Chairman of the Water Committee at Leicester, the following communication, dated Oct. 3rd, and addressed from the Water-works Office of that borough:—

"The storage capacity of the present Leicester reservoirs is 889,000,000 gallons of water, and at the average consumption of 17 gallons per head of the population (which is the quantity consumed when the service is on twenty-four hours per day) is capable of supplying a population of 235,000 persons. The population we have at present to supply with water is estimated to be 206,480. In the year 1890 the corporation went to Parliament to obtain powers to acquire land and raise capital for the supply of water from another watershed, and the construction of an additional storage reservoir capable of holding 550,000,000 gallons, estimated to supply a population of 100,000 persons. These works are in course of construction, and when completed the corporation will have, with an average rainfall, a water-supply equal to the demand of a population of over 300,000. The rainfall of this district averages 28 inches. In 1891 the rainfall was about 32 inches, in 1892 slightly under 23 inches, and in 1893 slightly under 22 inches, and in 1894 to the present date about 15½ inches, of which less than one inch fell in September. The corporation took steps in the autumn of last year to obtain an auxiliary supply of about 400,000 gallons per day from a spring near one of the large collieries situated about twelve miles from Leicester. This supply has been pumped into one of the storage reservoirs since the end of December last year. In addition to this, the engineers of the corporation discovered some springs upon the site of the new reservoir; that water has been pumped into one of the reservoirs since May last, bringing up the auxiliary supplies of water in the dry season to about 750,000 gallons per day. The present stock in our reservoirs amounts to 109,000,000 gallons, and, although the corporation engineers have always felt it advisable to leave about 50,000,000 gallons of water in each of the existing reservoirs, they, with the assent of the medical officer of health, feel there would be no danger to public health in bringing that water down a further 20,000,000 or 30,000,000 gallons from each reservoir. In addition to this, arrangements have been made with the owners of four of our large mills, who have deep wells, the average depth of which is 175 feet, and they have consented to the corporation taking from these wells all the water they can spare. This water is of good quality, with the exception that it is very hard. This water will be forced into the mains and will become assimilated with the water sent down from the reservoirs, and is expected to yield 500,000 gallons per day. The engineers of the corporation are also sinking two deep shafts, and the quality of the water obtained from these shafts is satisfactory, and as soon as they are down at sufficient depth this water will also be available for the use of the town. We have also other sources of supply which will be utilised should the drought continue. Although there is the uttermost need of economy, and it has been my duty in my official capacity to emphasise that need, it is the opinion of our engineers and of the Water Committee that the town will not be placed at greater inconvenience than it is at present, the water service now being from 7 A.M. to 6 P.M."

This is clear, and, as far as it goes, satisfactory, as showing that some of the recent paragraphs that have appeared may have been of an alarmist character. But it does not quite answer criticisms on a certain dilatoriness of the Water Committee in providing additional sources of supply, and it does not touch at all upon the effect that the want of water is having upon the borough, its health and industries. As a matter of fact, the manufactories and industries of Leicester have been during the past week interfered with to the extent of at least one hour per day. The health of the borough has not, however, suffered, and the suggestion that the cases of typhoid fever in the borough can in any way depend upon the scarcity or quality of the water-supply is unfounded.

CALENDAR OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE annual Calendar has just been published by the College. From it we ascertain the following facts—viz.: There are 1144 Fellows on the roll of the College (against 1122 last year), of whom 907 obtained the Fellowship by examination, 17 were elected as Members of twenty years' standing under section 5 of chapter 15 Vict., and 2 are "ad eundem" Fellows. There are 16,733 Members and 659 Licentiates in Midwifery. The Licentiates in Dental Surgery are stated to number 927. Holders of the Diploma of Public Health (granted by the Royal Colleges of Physicians of London and of Surgeons of England) number 189.

During the past collegiate year 648 candidates presented themselves for examination in elementary anatomy, of whom 511 passed and 137 were referred; 149 candidates presented themselves in elementary physiology, 124 of whom passed and 25 were referred; 486 candidates presented themselves in elementary biology, 327 of whom passed and 159 were referred. The examiners are appointed in conjunction with the Royal College of Physicians of London, under the scheme for an Examining Board in England. The fees paid by candidates for this examination amounted to £3395 3*s.* 6*d.*, the examiners receiving in fees £483 15*s.* Of 748 who presented themselves in chemistry, 416 passed and 332 were referred; in materia medica, of 492 candidates, 335 passed and 157 were referred; in practical pharmacy, of 197 candidates, 139 passed and 58 were referred. The examiners in chemistry, materia medica, and practical pharmacy are elected by the Royal College of Physicians of London.

The Examiners in Anatomy and Physiology for the Second Examination are appointed in conjunction with the Royal College of Physicians; they have conducted the Primary Examination under the old regulations as well as the Second Examination of the Examining Board; 822 candidates presented themselves for examination in anatomy, of whom 504 passed and 318 were referred; 861 candidates presented themselves in physiology, 503 of whom passed and 358 were referred. The fees paid by candidates for these examinations amounted to £3922 5*s.* 6*d.*, the examiners receiving £1383 8*s.* 8*d.*

The Board of Examiners in Anatomy and Physiology for the diploma of Fellow, elected annually by the Council, held during the past year two examinations: 160 candidates presented themselves, of whom only 62 passed, whilst 98 were referred. The fees received amounted to £1018 10*s.*, of which the board received £636. The Court of Examiners, ten in number (six of whom are also on the Council), are elected by the Council from the Fellows of the College for a period of five years. They conduct the third or final examination in surgery of the Examining Board, as well as the pass or final examination under the old regulations, and the pass or final examination for the Fellowship. During the year the Court has held two examinations for the Fellowship and four for the Membership; at the former there were 99 candidates, 54 of whom passed and 45 were referred. For the Membership 893 candidates presented themselves for examination in surgery, of whom 512 passed and 381 were referred. The fees paid by candidates for these examinations amounted to £10,139, and the fees paid to the Court of Examiners and the examiners in midwifery amounted to £5651 16*s.* The examiners in medicine under the scheme are elected by the Royal College of Physicians. Of 869 candidates who presented themselves for this examination during the year, 491 passed and 378 were referred. The examiners in midwifery are appointed in conjunction with the Royal College of Physicians, and have examined 859 candidates, 578 of whom passed and 281 were referred.

The Board of Examiners in Dental Surgery have held two meetings for the examination of 129 candidates, 88 of whom received the diploma and 41 were referred. The fees paid by the candidates amounted to £924, the board receiving £541 16*s.*

The Examiners in Public Health, appointed in conjunction with the Royal College of Physicians, have examined 46 candidates in Part I., 28 of whom passed and 18 were referred; in Part II. 48 candidates presented themselves, 26 of whom received the diploma and 22 were referred. The fees received for both parts amounted to £224 14*s.*, the examiners receiving £195 6*s.*

With regard to the finances of the College, it appears that the income from all sources amounted to £28,605 5*s.* 3*d.*, the largest receipt being derived from fees paid by candidates for the diplomas of the College—viz., £19,623 13*s.*—the next largest item being from dividends on the Erasmus Wilson bequest, £4723 18*s.* 11*d.* Rents from chambers adjoining the College produce £750; investments, £695 2*s.* 10*d.*; hire of rooms, sale of questions, &c., at Examination Hall (half receipts), £515 12*s.* 3*d.*; fees retained for referred candidates, £509 5*s.*; from trust funds, £251 1*s.* 9*d.*; incidental receipts (fees from Fellows by election, sale of calendars, &c.), £55 15*s.* 3*d.*; from sinking fund, 7*s.* 10*d.*; balance at bankers, 1893, £1480 8*s.* 5*d.*

The expenses for the year amount to £27,027 5*s.* 1*d.* (leaving a balance of £1578 0*s.* 2*d.*), the largest item being for fees to examiners, £8892 1*s.* 8*d.*; expenses of examinations (Fellowship and Dental only), £349 14*s.* 9*d.*; half expenses Examination Hall, £4281; half expenses research laboratories £697 13*s.* 3*d.*; extraordinary expenses—i.e., conversazione, bust of Sir R. Owen, furniture and fittings £494 6*s.* 3*d.*; rates, taxes, and insurance, £1154 16*s.* 6*d.*; alterations and repairs, £547 4*s.* 9*d.*; fees to Council, £262 10*s.*; salaries, wages, and pensions in the three departments (museum, library, and college), £5055 6*s.* 3*d.*; lectures, catalogue specimens, &c., for museum, £601 7*s.* 1*d.*; purchase of books, &c., for library, £662 16*s.* 1*d.*; fees returned to candidates, £462 10*s.*; purchase of stock for various purposes, £2074 7*s.* 10*d.*; trust funds and Morton Lecture, £225 16*s.* 11*s.*; micellaneous items—i.e., fuel, light, printing, stationery, &c.—£1265 13*s.* 9*d.*

During the past year, in addition to the ordinary work, consisting of repairs and remounting spirit preparations and skeletons, the museum has been enriched by upwards of 400 specimens by donation, purchase, or from the College stores. The amount of material sent for pathological investigation and report continues to increase, and now constitutes an important section of the routine work. Further development has taken place with regard to the use of the photographic camera and studio for obtaining illustrations of normal and morbid anatomy. These photographs have been employed for the purpose of illustrating lectures by means of a lantern, or for the construction of diagrams, woodcuts, prints, &c. There is every reason to believe that the advantages thus afforded by the College have been duly appreciated, and that in the future there will be a greater demand for them.

From the librarians' report it appears that the supply of new books has been well kept up. A very interesting collection of papers and drawings were presented to the College by the executors of the late Sir Richard Owen. This collection contains some of the notes from which Sir Richard Owen delivered his earliest Hunterian lectures, as well as notes taken by him at the lectures of Joseph Henry Green, Bell, and others. There is also a series of drawings by W. H. Clift of the heads of murderers who were sent to the College for dissection.

Including journals and transactions, the total number of volumes in the library is about 47,000, an increase during the year of about 1000 volumes. In the Secretary's report will be found an abstract of the work done by the Council, the Committee of Management at the Examination Hall, the laboratories on the Embankment, the Finance Committee, statements of elections, &c. During the year two members have been removed for misconduct.

CIVIL RIGHTS DEFENCE ASSOCIATION.

THE CASE OF MR. R. B. ANDERSON.

WE have been requested by Mr. R. B. Anderson, F.R.C.S., to give publicity to the following letter, which, with the approval of the Civil Rights Defence Association, he has sent to every Fellow of the Royal College of Surgeons:—

2, Heathcote-street, London, W.C., Sept. 24th, 1894.

DEAR SIR,—With the approval of the Civil Rights Defence Committee I am making my own personal appeal to each Fellow of the College of Surgeons for help in resisting the wrongs done to me, and the injuries which I suffer, by the judgments and proceedings of the Courts of Trinidad and Tobago, which are still in force against me; and in endeavouring to obtain the reparation and redress to which I am

entitled, and for aid in obtaining which I rely upon the sense of justice of my profession and the nation. The College, by appointing representatives to the committee, has sanctioned the appeal to the profession to help in the vindication of common rights. If you will do me the kindness to read the accompanying papers you will see that, for no more than the legal and strictly ethical practice of my profession, I am, so far as these judgments are concerned, stripped of every professional right that I possessed. In being deprived of the right to assure myself of payment for my services (and against fraud) before rendering them, I am deprived of the right even to give them, and the obligation to render them becomes slavery. Whilst those judgments are in force I am punished for having exercised my right to retire from a case even when insulted, and when no injury was caused by my retirement; and I am deprived of my right to charge for services actually rendered. To force me to submit to these wrongs I am further, with circumstances of the utmost indignity and injustice, stripped of every civil right that I should possess as a British subject and a free man, illegally imprisoned and illegally held to bail for months, as if I had been charged with some felony. Finally, after obtaining a verdict that these injuries were not only illegal, but malicious, I am told that because they were done by judges—which greatly enhances their malignity—I can have no redress or reparation. I earnestly appeal to you to take the facts into consideration, and, if you feel that such wrongs done to you would be intolerable, that you would to the very uttermost resent and resist them, I ask you to enter into the spirit of my resistance, and to afford such help as the committee are inviting, as will secure redress for the wrongs done, and vindicate the rights of the profession and the civil rights of British subjects, even in a distant colony. A subscription from each Fellow of the College, though below the maximum fixed by the committee, would go far towards enabling these judgments and proceedings to be reversed or quashed; and I venture to hope that my personal and earnest application to you, as a Fellow, will not be considered intrusive or out of place. I am, dear Sir, yours faithfully,

R. B. ANDERSON, F.R.C.S. Eng.

*** We are glad to recall the attention of our readers to Mr. Anderson's hard case and trust that his appeal will meet with a ready and generous response.—ED. L.

THE SCOPE OF THE RURAL SANITARY AUTHORITY.

WE have received from the medical officer of health for an English district the following seven questions:—1. Can the opinion of a committee of the rural sanitary authority override that of their medical officer of health on a question of nuisance? 2. Where the medical officer of health and the guardians disagree as to whether a particular pool is a nuisance, who is to decide? 3. Are the words "dangerous" and "injurious to health" of Section 91 of the Public Health Act of 1875 and in other Acts adopted by rural sanitary authorities applicable to the health of cattle? 4. Must a rural sanitary authority provide and maintain pure drinking-water for cattle? 5. Must a rural sanitary authority interfere where a pool (*a*) which is used by cattle for drinking, (*b*) which is fouled by the cattle dropping their excreta into it while drinking, (*c*) which receives by far its largest proportion of water from road washings and the surface of cultivated fields, and (*d*) which is *not* used or likely to be used for drinking or domestic purposes by man, is being made additionally foul by soakage from a pit used for the house and dry closet refuse of one cottage near the pool? 6. What diseases can cattle *acquire* by drinking impure and sewage-contaminated water or by eating grass from fields on which such water flows, and then *transmit* to man either by their flesh or their milk? 7. Is the presence of abundant animal life—e.g., tadpoles, newts, large beetles, and spiders—evidence for or against sewage contamination of a pool?

We are not able to give quite exhaustive answers to all these questions. Such a question as the sixth would suggest an essay in reply, and even then be left a little inconclusively dealt with. The fourth question, again, is one to which no authoritative answer can be given. There is a difference between a sentimental obligation, a moral obligation, a possible obligation, and an undoubted legal obligation, and we do not consider that we are in a position to decide upon all the points.

The following may, however, be of use to our correspondent:—

1. The work of a parochial committee is, under Section 202, Public Health Act, 1875, dependent on the regulations and restrictions imposed by the rural sanitary authority whose agents they are. The sanitary authority can devolve upon the committee the powers they have as to dealing with nuisances, and where this has been done the position of the medical officer of health towards the committee is the same as it would have been towards the sanitary authority. If the committee fail in their duty there should be appeal to the sanitary authority, for the Act states that "the appointment of such committee shall not relieve that authority from any obligation imposed on it by Act of Parliament or otherwise." 2. In such cases the medical officer of health is a skilled adviser. The administrative responsibility rests with the sanitary authority; but where the sanitary authority refuse to act any aggrieved individual may appeal to a justice under Section 105 of the Public Health Act, 1875, or to the Local Government Board under Section 106. Such appeal is not ordinarily made by the medical officer of health unless the nuisance affects him personally. 3. The words "dangerous" and "injurious to health" apply to mankind only, we think. 4. (See above) 5. In so far as such a pool is a nuisance the answer to the second question applies (*vide* also Sections 91–107, Public Health Act, 1875). 6. At various times reports have been made as to injury or danger to animals through eating grass from land on which sewage had been laid or water from sewage had flowed; but there has never been any positive proof of such injury. Nor has any disease in man been clearly traced to the use of the milk or flesh of such animals. 7. The evidence is not of definite sort either for or against. Such animal life may exist without sewage contamination, and excessive sewage contamination would tend to prevent it.

THE MEDICAL DEFENCE UNION.

AN adjourned special general meeting of the members of the Medical Defence Union took place at 20, Hanover-square, London, W., on Wednesday, Oct. 3rd, to consider the recent action of the council of the Union in connexion with the litigation between Dr. Collie and Mr. Bloxam.

Mr. Victor Horsley, who occupied the chair, opened the proceedings by calling upon the secretary, Dr. A. G. Bateman, to read a report prepared by the council defending the course they had taken in the matter under discussion, and characterising the recent agitation as artificial and misleading. The secretary then read a document detailing the special circumstances which led the council to take up the case.

Dr. Bennett thought that, after hearing the statement which had just been read, the Union should approve of the action of the council. He jocosely called upon Dr. Leslie Phillips to apologise, and submitted a resolution to the effect that the meeting, after hearing the full statement of facts concerning the recent litigation between the Union and Mr. Bloxam, and between Mr. Bloxam and Dr. Collie, was of opinion that no further discussion of the matter was required, and that the council had acted in the best interests of the profession.

Dr. Phillips protested against being made the scapegoat for the Union.

Mr. Bloxam complained that the Union had listened to a one-sided statement. He had never had an opportunity of stating his version of the matter and denied the charges brought against him by Dr. Collie.

Dr. Collie declined to enter into controversy with Mr. Bloxam, declaring that he had already sought the full light of a court of justice.

After some discussion the resolution endorsing the action of the officers of the Union was carried by 43 to 13 votes.

OPENING OF THE MEDICAL SCHOOLS.

MOST of the London medical schools, whether the formal introductory address to students has fallen into desuetude or no, have inaugurated their winter session with a dinner, attended by the past and present students, or by some other social gathering. We give a brief account of these functions.

GUY'S HOSPITAL.

The formal opening of the winter session took place on the evening of Oct. 1st, when a house dinner was held in the dining hall of the Students' Club. Mr. Durham, who presided, was supported by the treasurer of the hospital, Dr. Wilks, several members of the active staff, and by a large number of old Guy's men. The dinner was a great success, and Mr. Durham's after-dinner speech was a most happy and effective one. After the dinner a short time was spent in looking at exhibits of photographs, pathological drawings, cultures of bacteria, instruments, microscopes, books, &c., in the reading-room of the College. An adjournment was then made to the anatomical theatre, where, under the presidency of Dr. Wilks, a crowded meeting of the Physical Society was held. The Chairman gave a short introductory speech welcoming the new men, after which Mr. Lockhart Stephens read a paper, an abstract of which we print in another column.

KING'S COLLEGE HOSPITAL.

The annual dinner of old students of King's College Hospital marked the commencement of the medical session, and, with Professor Watson Cheyne, F.R.S., in the chair, attracted a large number of old friends from all parts of the country. In proposing the toast of the evening, "King's College Hospital and its Medical School," Professor Cheyne spoke of the various changes in the staff that had taken place since his first connexion with the school, and, after appreciative references to the work of Ferguson, Wood, Smith, and others, he mentioned the recent retirement of Sir Joseph Lister from active hospital work, and in glowing terms referred to the researches by which he had made King's College Hospital famous as the home of antiseptic surgery. Amongst other speakers were the Rev. Dr. Wace, chairman of the Hospital Committee; Dr. Lionel Beale, Dr. Shuttleworth, Surgeon-Captain Bond, Mr. T. H. Cheatle, Dr. Burney Yeo, Dr. Duffin, Dr. G. E. Moore, Dr. Tirard, and Dr. John Phillips. Mr. Percy L. Webster and Mr. A Schartau contributed an excellent selection of songs and musical sketches during the evening.

LONDON HOSPITAL.

The annual dinner and reunion of old London Hospital students was held in the College library on Monday, Oct. 1st, Dr. Hughlings Jackson in the chair. After dinner Dr. Jackson, in an admirable speech, proposed the London Hospital and Medical College; this was replied to by Dr. Stephen Mackenzie and Mr. Treves on behalf of the College, and by Mr. Murray Ind (an old chairman) on behalf of the Hospital Committee. The health of the Chairman was then eulogistically proposed by Mr. Carr Gomm, also an old chairman of the Hospital Committee, and Dr. Jackson briefly replied. An adjournment then took place to the museum, where, coffee and cigars being provided, old reminiscences were talked over by the numerous alumni of the hospital who had gathered together for the occasion.

MIDDLESEX HOSPITAL.

The introductory address was delivered by Dr. Robert Boxall in the large lecture theatre to a crowded audience of students and their friends. At the conclusion of the address Dr. Coupland (the Dean of the School) read his statement for the past year. The prizes gained during the preceding year were then distributed by Mr. J. W. Hulke, F.R.S., President of the Royal College of Surgeons, with a few well chosen words to the recipients. A well attended reception was afterwards held in the dining-hall of the Residential College. In the evening a large number of past and present students attended the annual dinner at the Holborn Restaurant. Dr. Kingston Fowler presided, and among the guests present were Mr. J. Bell Sedgwick, J.P., the Rev. Canon Acheson, Mr. H. C. Houghton, Mr. W. E Gillett, the Hon. C. G. Gathorne-Hardy, Sir Ralph Thompson, K.C.B., Mr. Wilhelm Ganz and others. A pleasant evening was spent, and the usual speeches were enthusiastically received. The admirable playing of Mr. Wilhelm Ganz was a feature of the musical part of the programme.

ST. BARTHOLOMEW'S HOSPITAL.

The annual reunion of old St. Bartholomew's men was this year one of the most successful on record, when over 120 old students and guests were present at the dinner held on Oct. 1st. Dr. Thorne Thorne, C.B., F.R.S., presided, and was supported by most of the hospital staff and several guests, amongst whom were Sir Richard Quain, Bart., F.R.S.; Sir William Flower, F.R.S.; Professor Allbutt, Regius Professor of Physic at Cambridge; Professor Roy; Sir Frederick Abel, F.R.S.; Professor Charles Stewart; Dr. F. W. Barry; Mr. C. N. Dalton, of the Local Government Board; and Mr. Trimmer. Dr. Thorne Thorne, who proposed the toast of the evening, congratulated the students on the encouragement to research in pathology afforded by the generous gift by Sir Trevor Lawrence, the treasurer of the hospital, of a Research Scholarship of the value of £100 a year. He also referred to the provisions which had been made for the physical culture of the students, over £7000 having been spent on a recreation park at Winchmore Hill. The health of Dr. Hensley, the honorary secretary, who organised the dinner, was proposed by Dr. Thorne.

ST. GEORGE'S HOSPITAL.

The past and present students of the St. George's School dined together as usual on the evening of Oct. 1st, in the Whitehall Rooms of the Hôtel Métropole. Upwards of a hundred guests sat down. Sir William Dalby presided, and proposed the toast of the evening, "Success to St. George's Hospital and its School," which was responded to by Mr. Pickering Pick, treasurer of the school. To the health of the "Governors of the Hospital," proposed by Mr. Haward, Dr. Duka replied. The Chairman's health was proposed by Dr. Bowles, and that of the orator of the day, Dr. Isambard Owen, by Mr. Holmes. Mr. Edgecombe Venning responded for the past, and Mr. Arthur Evans, Senior House Physician, for the present students, whose health Mr. Rouse proposed. The services of the hon. secretaries, Mr. Dent, Mr. Frost, and Dr. Gerald Harper, were enthusiastically acknowledged.

ST. MARY'S HOSPITAL.

The annual dinner of the past and present students was held on Oct. 1st at the Café Royal, Regent-street, Dr. G. Danford Thomas in the chair. Among those present were: Sir William Broadbent, Bart., senior physician; Mr. A. Norton, senior surgeon; Mr. George P. Field, dean of the medical school; Sir J. Crichton Brown, and many members of the hospital staff and old St. Mary's men. The total number present amounted to about 150, and the proceedings throughout were of a most cordial character. In proposing the Royal toasts the Chairman made especial reference to the gracious support which the Royal Family had always extended towards the hospital. In reply to the toast of "The Army and Navy and Reserve Forces," Surgeon-Captain Julian Hayes (replying for the Army) insisted upon the importance of the efficiency of the Army Medical Department, while Staff-Surgeon T. J. Preston, R.N. (responding for the Navy), spoke in confident terms of the present position of the Royal Navy. Surgeon-Lieutenant-Colonel A. J. Norton, Commandant of the Volunteer Medical Staff Corps, replied for the Reserve Forces. In giving the toast of "The Past and Present Students of St. Mary's Hospital," the Chairman made a vigorous and telling appeal to all St. Mary's men wheresoever situated to rally round their Alma Mater at the present time, when such important advances are about to be made. The urgent necessity for adequate accommodation to cope with the ever increasing number of patients, and to maintain and still further develop the prosperity of the medical school, were insisted upon. Dr. M. Handfield Jones replied for the Past, and Mr. H. G. Lawrence for the Present Students. Mr. J. Coleman Barr proposed the toast of "The Staff," and Mr. Edmund Owen responded. Sir James Crichton Browne proposed the health of "The Dean of the Medical School, Mr. George P. Field." The health of the Chairman was then proposed by Sir Wm. Broadbent, and Dr. Danford Thomas having replied, the proceedings terminated.

ST. THOMAS'S HOSPITAL.

The prizes for the last session were distributed by the Rev. W. W. Merry, D.D., Rector of Lincoln College and Public Orator in the University of Oxford (a report of whose speech is published in another column). During the afternoon the various departments of the hospital and school were

open for the inspection of visitors. Refreshments were provided in the library. The annual dinner took place on the evening of Oct. 1st in the club-rooms of the Medical School, Dr. Clapton in the chair. Over 160 old students and their friends were present. The toast list was wisely restricted to reasonable dimensions, but an opportunity was afforded to those present of hearing another capital speech by Dr. Merry. Old students who had not visited their hospital for some time were much surprised and pleased with the excellent new school buildings.

WESTMINSTER HOSPITAL.

The prize-giving at Westminster Hospital Medical School took place on Oct. 1st in the large theatre of the school, the Right Hon. Lord KNUTSFORD, G.C.M.G., being in the chair. The annual dinner took place at the Café Monico on Oct. 1st, and was attended by sixty members of the staff and old students, &c. Mr. MACNAMARA, F.R.C.S., occupied the chair, and the proceedings were characterised throughout by a cordiality bordering on enthusiasm.

UNIVERSITY COLLEGE HOSPITAL.

The annual dinner of the old and present students of the Medical Faculty of University College, London, was held at the Hôtel Métropole on Monday, Oct. 1st, under the presidency of Sir John Williams. Covers were laid for 139. Among those present were Dr. Russell Reynolds, F.R.S. (the President of the Royal College of Physicians), Dr. George Harley, F.R.S., Dr. C. Marriott, Mr. William Sedgwick, and all the present members of the hospital staff. Mr. Erichsen, the President of the College, telegraphed to the Chairman his regret at his unavoidable absence. Sir John Williams, in proposing the toast of the evening, alluded to the proposed rebuilding of the hospital. What was wanted, he said, was a typically healthy clinical hospital of 300 to 400 beds, provided with all the latest hygienic improvements, and with every facility for the scientific investigation and treatment of disease. The toast was responded to by Mr. Christopher Heath in very happy terms. Dr. W. V. Snow, speaking on behalf of the old students who had left the College, said he felt sure that when definite proposals were laid before them they would extend to them their hearty support. Mr. Hancocke Wathen said he was determined that the remarks of the Chairman should not pass without some evidence that old students were personally willing to give some assistance. He thought that the old students from the Principality of Wales might combine together to provide some definite portion of the new hospital, and he would start a fund for that purpose with a subscription of £100. Sir John Williams promised to give £250, Dr. William Price £100, and Dr. T. D. Griffiths £50. The health of the Chairman was proposed by the last-named gentleman and his old schoolfellow and fellow student, and was very cordially received.

CHARING-CROSS HOSPITAL.

The opening of the session 1894–95 was made the occasion of a conversazione at the Medical School, Chandos-street, Strand, on Monday evening, Oct. 1st. The Dean and the Treasurer of the school received their numerous friends in the students' club-room, and the distribution of prizes for the past summer and winter sessions, by Professor Alexander Macalister, F.R.S., afterwards took place in the anatomical theatre. Dr. Abercrombie then gave a lecture in the Physiological theatre based on a tour in Greece. This was well illustrated by lantern slides. A concert and operetta in the concert-room then followed, and a full evening concluded with the first performance of a new and original musical duologue, entitled: "Love Me, Love My Dog," written by Mr. George Hawtrey and composed by Mr. Edward Solomon. The parts in this were taken by Miss Frances Maas, Miss Matthews, and the author, while the composer rendered the accompaniments. Throughout the evening many interesting demonstrations and exhibits were provided in various departments of the school; and a select orchestra from the Queen's Westminster band, by kind permission of Colonel Howard Vincent, C.B., M.P., under the direction of Mr. Albert Mansfield, played in the museum.

ST. THOMAS'S HOSPITAL MEDICAL SCHOOL.—The first Entrance Scholarship in Science of £150 has been awarded to Mr. J. Goff, and the second of £60 to Mr. H. R. Beale. The University Scholarship of £50 has been won by Mr. W. McDougall, B.A. Cantab., B.Sc., Victoria.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORT OF THE MEDICAL OFFICER OF HEALTH OF THE LONDON COUNTY COUNCIL FOR THE YEAR 1892.[1]

[THIRD NOTICE.]

UNDER the heading of "Administration and Legislation," Mr. Shirley Murphy deals with the several subjects with which the work of the medical department of the County Council has been more particularly concerned.

Commencing with the dairies, cowsheds, and milkshops Mr. Murphy draws attention to an outbreak of cow-pox which occurred during 1892 in Poplar, and which was inquired into by Dr. Hamer. It appears that the disease was introduced into Poplar by means of a cow from St. Ives, and that this cow was instrumental in conveying cow-pox to twenty-two others. The milker of the first cow contracted cow-pox and appears to have conveyed it to his wife; both the milker and his wife had been vaccinated in infancy, but never revaccinated. Mr. Shirley Murphy also refers to the outbreak of enteric fever which occurred in South-east London, and which was traced to the consumption of ice-creams; and also to Dr. Hamer's report on an outbreak of scarlet fever which was due to infected milk in the same part of London, and to which we referred in a previous notice. One of the effects of these several outbreaks was that a joint committee of the Council was instructed to report whether any communication could be made to the Board of Agriculture as to including eruptive disease of the teats and udder of the cow under the Contagious Diseases (Animals) Act. Mr. Shirley Murphy then gives for the benefit of the Council a short *résumé* of the investigations of Mr. W. H. Power and Dr. Klein as regards cow scarlet fever, and quotes the opinion of Professor Brown of the Veterinary Department of the Board of Agriculture that "the slightest sign of udder or other disease should be accepted as a sufficient reason for excluding the animal's milk from the common stock." In the end it appears that the joint committee advised the Council to request the Board of Agriculture to cause eruptive disease of the teats and udder of the cow to be notified, together with tuberculous disease.

Offensive Trades.

The action taken by the Council as regards offensive trades is recorded under this head, and the following table, which will be useful for subsequent comparison, is given, showing the average number of animals killed per week during summer and winter respectively in the slaughter-houses licensed by the Council:—

	Average number of animals killed weekly.	
	Winter.	Summer.
Beasts	1080	 886
Sheep and Lambs ...	8954	 11,821
Calves	96	 287
Pigs	1346	 692

Factories and Workshops.

In reference to the action taken in 1892 by the several sanitary authorities, Mr. Shirley Murphy remarks that the annual reports for that year indicated that only in exceptional instances was any systematic attempt made to carry out the new duties imposed upon sanitary authorities by the Factory and Workshops Act and the Public Health (London) Act, 1891. During the year under review Dr. Hamer inspected some of the workshops in certain districts, and the results are herewith given:—

—	Number of workshops inspected.	Number over-crowded.	Number of over-crowded workshops per cent. of total workshops inspected.
Mile-end Old-town ...	44	27	61
Whitechapel	47	22	46
St. George-in-the-East...	14	4	28
Bethnal-green	5	2	40
Strand	4	—	—

[1] The First and Second Notices were published in THE LANCET of Sept. 8th and 22nd, 1894.

Bakehouses.

So much has been recently said and written on the subject of bakehouses in London that it is hardly necessary for us to refer in detail to the conditions obtaining in 1892. Mr. Shirley Murphy gives extracts from the report of the district medical officers of health showing the insanitary condition of the bakehouses in the various districts. Some of the annual reports appear to have contained no reference whatever to the subject of bakehouses. All the extracts given in the report before us agree as to the necessity of registration. In St. Pancras it appears 85 per cent. of the bakehouses were below the ground level, while in Shoreditch the 63 bakehouses in the district were "generally, with few exceptions, in a filthy and unwholesome state, dangerous alike to the health of the journeyman baker who makes the bread and the public who eat it."

Common Lodging-houses.

After dealing with the action taken in London during 1892 as regards "houses let in lodgings," Mr. Shirley Murphy refers briefly to the recommendations of the Public Health and and Housing Committee as to the supervision of common lodging-houses in London. The committee recommended annual registration, and that regulations should be made by the Council and enforced by the sanitary authorities instead of the police, but that the police should still have right of entry. The progress which has been made in this matter since 1892 will be familiar to our readers.

Smoke Nuisance.

Every Londoner has an interest in the abatement of this nuisance, and we feel sure the very instructive accompanying table will provide food for some reflections on past administration in this respect. It will be remembered that the Public Health (London) Act, 1891, transferred from the Commissioner of Police to the sanitary authority the duty of administering the provisions relating to the abatement of smoke nuisance. The following table shows the number of police officers employed in previous years and the proceedings taken in respect to smoke nuisances:—

—	No. of police employed.			Cost.			Cases reported.	Cases where proceedings were taken.	Convictions.	Cases dismissed or withdrawn.
	Sergeant.	Constables.	Part time constable.	£	s.	d.				
1882	1	7	41	3277	14	8	1248	168	162	6
1883	1	9	39	3378	5	4	1113	126	119	7
1884	1	9	39	3336	13	4	1064	145	137	8
1885	1	9	40	3398	5	4	967	124	120	4
1886	1	9	40	3530	16	0	940	92	82	8
1887	1	20	29	3518	13	4	856	86	81	5
1888	1	21	28	3641	14	8	694	53	49	4
1889	1	24	23	3594	18	8	769	68	60	8
1890	1	24	23	3657	6	8	702	53	46	7

The imposing of the duty of smoke abatement upon the sanitary authorities should lead to a great improvement in the condition of London in this respect. We note, however, that, although many smoke nuisances were abated in 1892, in about one-third of the annual reports no reference is made as to the action taken in regard to this matter.

Housing of the Working Classes.

Mr. Shirley Murphy gives an account of the action taken in reference to the unhealthy areas concerning which reports were presented to the Council by the Public Health and Housing Committee; but to refer further to this important subject here would occupy too much of our space. Under the Housing of the Working Classes Act, 1890, there were in 1890 397 houses reported to sanitary authorities as unfit for human habitation; in 1891 1361 were similarly reported; while in 1892, owing to the provisions of the Public Health (London) Act, 1891, being largely made use of, there were but 469 representations under the Housing of the Working Classes Act.

Mortuaries and Disinfection.

As regards mortuaries, in addition to an inquiry as to the provision by each sanitary authority, and as to the number of bodies received in the several mortuaries during each of the preceding three years, an inspection by the officers of the Council was made of all the mortuaries in London. In a number of cases we are told that the mortuary provision was inadequate. Under the heading of "Disinfection" is set forth the provisions for disinfecting possessed by each sanitary authority in London, and from thisit appears that in 1892 about one-third of the sanitary districts in London used dry heat for disinfecting purposes.

Foods and Drugs Act.

Mr. Shirley Murphy gives here a very interesting table, which we reproduce, serving to show to what extent the Act was carried out in the several districts of the metropolis in 1892.

Sanitary Districts.	Number of samples examined per 1000 of population (Census, 1891).	Sanitary Districts.	Number of samples examined per 1000 of population (Census, 1891).
Kensington	3·1	Bethnal-green	0·7
Hammersmith	2·3	Whitechapel	1·9
Fulham	1·4	St. George-in-the-East	3·3
Paddington	2·3	Limehouse	2·4
Chelsea	1·6	Mile-end Old Town ...	1·8
St. George, Hanover-square	4·9	Poplar	1·7
Westminster	1·6	St. Saviour, Southwark	5·6
St. James	2·4	St. George, Southwark	1·3
Marylebone	3·6	Newington	0·4
Hampstead	3·1	St. Olave	3·5
Pancras	0·8	Bermondsey	2·4
Islington	1·1	Rotherhithe	0·2
Hackney	0·8	Lambeth	1·2
St. Giles	4·6	Battersea	0·6
St. Martin-in-the Fields	1·5	Wandsworth	1·9
Strand	9·9	Camberwell	0·8
Holborn	1·2	Greenwich	1·2
Clerkenwell	2·5	Lewisham	0·6
St. Luke	3·4	Woolwich	2·5
London, City of	3·1	Plumstead	2·2
Shoreditch	0·8		

London Water-supply.

Since 1892 we have had the report of the Royal Commission on Metropolitan Water-supply, as also a memorandum by the officers of the London County Council on the report in question. Both these we have fully noticed elsewhere, and we shall therefore content ourselves here with a brief reference to this part of Mr. Shirley Murphy's report. He gives a short *résumé* of Dr. Frankland's report for the year 1892, and refers to the remarks made by Dr. Frankland as to the need of additional storage reservoirs and larger filtering areas. He also introduces Major-General Scott's table showing the provisions made by the several water companies drawing their supplies from the Thames and Lea. Having regard to the great interest which is taken—not only by all Londoners, but by all river-water consumers—in the subject of water filtration, the table in question is reproduced on the following page.

Mr. Murphy discusses the desirability for some authoritative definition of the term "effectually filter," used in the Metropolitan Water Act, 1852, and he gives Koch's conditions for efficient filtration which we have frequently referred to in these columns. As Mr. Murphy points out in commenting upon the rate of filtration, it would be well if the maximum rates at any one time were given in addition to the average monthly rates of flow. Obviously this is the crucial point to determine in connexion with all filtering arrangements. The standard laid down by Koch would give a rate of approximately two gallons per hour per superficial foot of filter, and it will be seen at once, by referring to the table, that this rate was materially exceeded by several of the companies. In conclusion, Mr. Murphy draws attention to Dr. Frankland's remarks as to double filtration, and the desirability of its adoption. Certainly, as far as we are able to judge, and looking at the liability to break down which appertains even to the best-regulated filters, double filtration would seem to be the only really reliable method of treating

Company.	Capacity of subsidence reservoirs.		Filters.		Thickness of sand in filters.		Monthly rate of filtration per square foot per hour, 1892.	
	Cubic contents.	Number of days' supply.	Area.	Area per million gallons of average daily supply.	Maximum.	Minimum.	Mean monthly averages.	Maximum monthly averages.
	Gallons, millions.		Acres.	Acres.	Ft. in.	Ft. in.	Gallons.	Gallons.
Chelsea	140·0	14·7	6·75	0·71	4 6	3 6	1·75	1·75
East London	615·0	15·1	29·75	0·73	2 0	1 4	1·33	1·33
Grand Junction	64·5	3·5	17·75	0·96	2 0	1 3	1·99	2·25
Lambeth	128·0	6·4	9·50	0·48	3 0	2 6	2·15	2·36
New River	168·1	4·8	16·50	0·48	2 3	1 5	2·08	2·30
Southwark and Vauxhall	66·0	2·5	14·50	0·55	3 0	1 6	1·50	3·50
West Middlesex	117·5	6·7	15·00	0·86	3 3	2 6	1·25	1·33

water drawn from sewage-polluted rivers; and even under these circumstances it would be necessary so to arrange the filters that one of them should possess a well-developed film over the surface of the filter. In the matter of constancy of supply, Mr. Murphy refers to the powers which the County Council have in reference to the provision of this, and he points out that, owing to the Council's action, 69 per cent. of the houses in London were at the end of 1892 on the constant service. It may interest our readers if we here give the figures taken from the last monthly official report as to the metropolitan water supply (July, 1894).

In the following statement the percentage of house-supplies on the constant system in each company's district on Dec. 31st, 1893, and at the end of the month, are compared:—

Water Companies.	Dec. 31st, 1893.	July 31st, 1894.
Chelsea	51 per cent.	57 per cent.
East London	99 ,,	99 ,,
Grand Junction	100 ,,	100 ,,
Kent	61 ,,	69 ,,
Lambeth	61 ,,	63 ,,
New River...	58 ,,	59 ,,
Southwark and Vauxhall	86 ,,	89 ,,
West Middlesex	57 ,,	62 ,,

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 5883 births and 3223 deaths were registered during the week ending Sept. 29th. The annual rate of mortality in these towns, which had been 15·9 and 15·7 per 1000 in the preceding two weeks, rose again last week to 16·1. In London the rate was 15·3 per 1000, while it averaged 16·6 in the thirty-two provincial towns. The lowest rates in these towns were 8·0 in Leicester, 10·7 in Croydon, 11·4 in Birkenhead, 11·7 in Bristol, and 11·8 in West Ham; the highest rates were 20·2 in Halifax, 20·7 in Sunderland, 20·9 in Newcastle-upon-Tyne, 22·5 in Preston, and 22·8 in Liverpool. The 3223 deaths included 418 which were referred to the principal zymotic diseases, against 467 and 415 in the preceding two weeks; of these, 147 resulted from diarrhœa, 98 from diphtheria, 49 from scarlet fever, 43 from "fever" (principally enteric), 40 from measles, 36 from whooping-cough, and 5 from small-pox. The lowest death-rates from these diseases were recorded in Derby, Leicester, Croydon, and Brighton, while they caused the highest rates in Liverpool, Cardiff, Wolverhampton, Preston, and Bolton. The greatest mortality from measles occurred in Sunderland and Hull; from scarlet fever in Salford, Huddersfield, and Wolverhampton; from whooping-cough in Bolton; and from diarrhœa in Cardiff, Gateshead, Blackburn, Bolton, and Preston. The mortality from "fever" showed no marked excess in any of the large towns. The 98 deaths from diphtheria included 67 in London, 5 in Cardiff, 5 in Liverpool, 3 in Bristol, and 3 in Manchester. Two fatal cases of small-pox were registered in Birmingham, 2 in Liverpool, and 1 in London, but not one in any other of the thirty-three towns. There were 98 cases of small pox under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday last, the 29th ultimo, against 129, 109, and 100 at the end of the preceding three weeks; 14 new cases were admitted during the week, against 13, 19, and 23 in the preceding three weeks. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 2084, against 2026, 2080, and 2060 on the preceding three Saturdays; 252 new cases were admitted during the week, against 269 and 258 in the preceding two weeks. The deaths referred to diseases of the respiratory organs in London, which had increased from 123 to 172 in the preceding four weeks, further rose to 184 last week, but were 24 below the corrected average. The causes of 43, or 1·3 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Bristol, Leicester, Nottingham, Bradford, and in thirteen other smaller towns; the largest proportions of uncertified deaths were registered in Birmingham, Preston, Leeds, and Sunderland.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had declined from 15·6 to 14·9 per 1000 in the preceding three weeks, rose again to 15·1 during the week ending Sept. 29th, but was 1·0 per 1000 below the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 10·7 in Aberdeen and 11·5 in Edinburgh to 15·5 in Leith and in Paisley and 17·9 in Glasgow. The 432 deaths in these towns included 16 which were referred to diphtheria, 14 to whooping-cough, 12 to diarrhœa, 7 to scarlet fever, 4 to "fever," 3 to measles, and not one to small-pox. In all, 56 deaths resulted from these principal zymotic diseases, against 63 and 53 in the preceding two weeks. These 56 deaths were equal to an annual rate of 2·0 per 1000, which was slightly below the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of diphtheria, which had been 10 and 12 in the preceding two weeks, further increased to 16 last week, of which as many as 12 occurred in Glasgow. The deaths referred to whooping-cough, which had been 5 and 10 in the preceding two weeks, further rose to 14 last week, and included 9 in Glasgow and 2 in Dundee. The 12 fatal cases of diarrhœa showed a marked decline from those recorded in recent weeks, and included 7 in Glasgow. The deaths from scarlet fever, which had been 7, 11, and 4 in the preceding three weeks, rose again to 7 last week, of which 2 occurred in Glasgow, 2 in Edinburgh, and 2 in Greenock. The fatal cases of "fever," which had been 5 and 6 in the preceding two weeks, declined again to 4 last week. The deaths referred to diseases of the respiratory organs in these towns, which had been 67 and 74 in the preceding two weeks, declined to 68 last week, and were 20 below the number in the corresponding week of last year. The causes of 31, or more than 7 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had declined in the preceding three weeks from 26·1 to 20·4 per 1000, rose again to 21·5 during the week ending Sept. 29th. During the thirteen weeks of the quarter ending on Saturday last the death-rate in the city averaged 20·8 per 1000, against 15·9 in London and 14·7 in Edinburgh. The 144 deaths registered in Dublin during the week under notice showed an increase of 7 upon the number in the previous week, and included 16 which were referred to the principal zymotic diseases, against 15 and 16 in the preceding two weeks; of these, 8 resulted from diarrhœa, 4 from "fever," 2 from small-pox, 2 from whooping-cough, and not one either from measles, scarlet fever, or diphtheria. These 16 deaths were equal to an annual rate of 2·4 per 1000, the zymotic death-rate during the same period being 1·9 in London and 1·0 in Edinburgh. The fatal cases of diarrhœa, which had been 8 and 6 in the preceding two weeks, rose again to 8 last week. The deaths referred to different forms of "fever," which had been 5, 2, and 7 in the preceding three weeks, declined again to 4 last week. The 2 fatal cases of whooping-cough corresponded with the number in the preceding week. Two more deaths from small-pox were registered in Dublin last week, making 17 fatal cases of this disease during last quarter. The 144 deaths last week included 25 of infants under one year of age, and 43 of persons aged upwards of sixty years; the deaths of infants showed a decline, while those of elderly persons exceeded those recorded in any recent week. Six inquest cases and 2 deaths from violence were registered; and 55, or more than a third, occurred in public institutions. The causes of 9, or more than 6 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

MOVEMENTS OF THE MEDICAL STAFF.

SURGEON-MAJOR HAYWARD has returned from India on sick leave. The following officers have embarked in the *Dilwara* for a tour of service in India: Surgeon-Major O'Connell and Surgeon-Captains Gray and O'Halloran. Surgeon-Captain Rawnsley has arrived from Jamaica on completion of a tour of service. Brigade-Surgeon-Lieutenant-Colonel Clapp and Surgeon-Captain McCulloch have arrived from Mauritius on relief. Surgeon-Major Flood has been transferred to Weedon from the Western District. Surgeon-Lieutenant-Colonel Miller has been transferred to Chatham from Portsmouth, and Surgeon-Major Crofts from the Eastern District to Dublin. Surgeon-Captain R. Crofts has arrived at Sierra Leone. Surgeon-Major Bedford has been appointed to succeed Surgeon-Lieutenant-Colonel Webb as Staff Officer of the Medical Staff Corps at headquarters. Leave of absence from Netley has been granted to Surgeon-Captain Bent from Oct. 1st. to Dec. 31st.

ARMY MEDICAL STAFF.

The undermentioned Surgeon-Captains are placed on temporary half-pay on account of ill-health: Henry Anthony De Lom and John Furse McMillan.

THE INDIAN MEDICAL SERVICES.

Surgeon-Captain C. N. Bensley, Civil Surgeon, Chanda, is appointed to the executive and medical charge of the Chanda Gaol. Surgeon-Major G. F. A. Harris, Civil Surgeon, Nagpur, is appointed to the temporary medical charge of the Nagpur Central Gaol. The services of Surgeon-Captain W. J. Buchanan, M.B., B.Ch., I.M.S. (Bengal), are placed temporarily at the disposal of the Government of Bengal. Surgeon-Major Robertson, British Agent at Gilgit, is expected to reach India on his return from leave in October. He proceeds to his post without delay before the closing of the Cashmere Passes. Surgeon-Lieutenant-Colonel W. Barren, I.M.S., reported his departure on two years' furlough on private affairs on the 7th ult.

NAVAL MEDICAL SERVICE.

Staff-Surgeon Henry Anthony Wills Richardson has been promoted to the rank of Fleet-Surgeon in Her Majesty's Fleet.

The following appointments are notified:—Surgeons: Alexander G. Andrews, to the *Pylades;* H. E. L. Earle, to the *Victory*, additional; E. F. Mortimer, to the *Pheasant;* W. R. Knightley, to the *Albacore;* Montague H. Knapp, to the *Australia;* James L. Smith, M.B., to Haslar Hospital; Frederick D. Lumley, to the *Jackal;* and Horace Elliott, M.D., to the *Wildfire*. Surgeon and Agent: Cecil Orpin, M.D., at Youghal. Staff Surgeon: A. G. P. Gipps, to Plymouth Hospital.

MILITIA MEDICAL STAFF.

Surgeon-Lieutenant-Colonel W. Taylor, M.D., 3rd Battalion, the Welsh Regiment, retires under the provisions of paragraph 82 of the Militia Regulations, 1894, with permission to retain his rank, and to wear the prescribed uniform on his retirement.

VOLUNTEER CORPS.

Rifle: 1st Roxburgh and Selkirk (the Border): Surgeon-Lieutenant W. T. Barrie, M.B., to be Surgeon-Captain.

The following officers retire under the provisions of paragraph 111 of the Volunteer Regulations, 1893, viz.: 8th Volunteer Battalion, the Royal Scots (Lothian Regiment): Surgeon-Lieutenant-Colonel A. Gilmour, with permission to retain his rank, and to continue to wear the uniform of the Battalion on his retirement.—2nd Volunteer Battalion, the Royal Scots Fusiliers: Honorary Assistant-Surgeon J. Lawrence, M.D.

ARMY MEDICAL SCHOOL, NETLEY, SIXTY-NINTH WINTER SESSION.

The sixty-ninth session of the Army Medical School, Netley, commenced on Tuesday, Oct. 2nd. The following are lists of the surgeons on probation for the Army Medical Staff and Indian Medical Service who are now passing through the school, with lists of the marks obtained at the London examinations:

ARMY MEDICAL SERVICE.

Names in order of merit.	Marks 4600.	Names in order of merit.	Marks 4600.
Howell, H. A. L.	2445	Profeit, C. W.	2075
Lawson, D.	2270	Whitehead, J. H.	2013
Harrison, W. S.	2260	Tomlinson, L. P.	1999
Steel, E. B.	2178	Kiddle, F.	1986
Perry, S. J. C. P.	2168	Murison, J. A.	1978
Staddon, H. E.	2068	Heaton, A. F.	1940

INDIAN MEDICAL SERVICE.

Names in order of merit.	Marks 4600.	Names in order of merit.	Marks 4600.
Milne, C. T.	2727	Ward, A. E. F.	2237
Watling, F. H.	2574	Evans, S.	2235
Stevens, A. F.	2500	McDonald, J. H.	2206
Gwyther, A.	2446	Morgan, E. J.	2187
Carr, W.	2382	Wall, F.	2021
McMillan, J. D.	2307	Matthew, C. M.	2018
Bensley, C. H.	2283	Hamilton, J. A.	2000

THE MADRAS INCIDENT.

Touching a matter connected with the conduct of a medical officer to which we alluded lately, we learn from the Indian journals that, the papers having been transmitted to the Secretary of State for India for decision, a reply has been received ordering the surgeon-major concerned to resign the Service forthwith on a compassionate allowance equal to half the pay of his present rank, and adding that the case had been leniently dealt with by the Madras Government. Under these circumstances it is believed that a full and accurate statement of this unfortunate case can hardly have been made known, as it does not seem probable that the Indian Government would otherwise have taken this severe action. Taking the case so far as it is known, it seems to us that the medical officer would have been sufficiently severely dealt with if he had been at once deprived of his civil appointment and its advantages and removed from the district. His conduct cannot be defended, of course, but he had not been guilty of any breach of public trust or wilful neglect of duty. It is alleged, also, that he has never been made officially acquainted with the exact nature of the charges against him. The effect of the decision not only closes the officer's career in the Service, but is tantamount to his professional ruin.

DEATH OF DEPUTY-INSPECTOR-GENERAL OF HOSPITALS G. E. BLENKINS.

We regret to announce the death of Deputy-Inspector-General G. E. Blenkins, F.R.C.S., late Grenadier Guards, at Worthing, on the 26th ult. The deceased officer became an assistant-surgeon and joined the regiment in April, 1838, and served with it for upwards of thirty years, having retired in December, 1868. He became a surgeon in 1854, surgeon-major in 1858, and honorary deputy-inspector-general of hospitals in 1868, and served with the Grenadier

Guards in the Crimean campaign from December, 1854, including the siege and fall of Sebastopol, receiving the medal with clasp and Turkish medal, and Order of the Fifth Class of the Medjidie. He was promoted to the rank of surgeon just before the Crimean War, and to that of surgeon-major shortly after the cessation of hostilities.

THE OPIUM COMMISSION.

A correspondent, writing to the *Times* of the 2nd inst., states that the probable cost of this Commission will be £20,000, to be divided equally between the British and Indian exchequers. It is expected that the Commissioners will finally consider and settle their report in November next, and that the report will be against any interference with the present system—a result, by the way, anticipated by everyone after having read all the evidence, medical and otherwise. The Chinese side of the evidence has not yet been received.

THE LATE SURGEON-LIEUTENANT R. A. YEATES.

We regretfully announce the death of this young officer, late of the Indian Medical Service, at Madras, on the 17th ult., from fever, on his way to England.

The *Pioneer Mail* says it has been arranged that the Staff Surgeon or officer in medical charge of the Staff in any station shall be the medical attendant on the officers of the Royal Indian Marine and their families. In Bombay and Aden this duty will naturally devolve on the Marine and Port Surgeons respectively, as at present.

Correspondence.

"Audi alteram partem."

TESTIMONIAL TO SIR JOSEPH LISTER.

To the Editors of THE LANCET.

SIRS,—Sir Joseph Lister having retired from active hospital and teaching work, it is proposed to present him with a testimonial of the regard and esteem in which he is held by his former colleagues and pupils. As there are probably many surgeons who may wish to join in the movement, but whose names and exact addresses it is almost impossible for us to ascertain, I have been directed by the committee to state that I shall be pleased to furnish anyone with further information, and that subscriptions (limited to 2 guineas) may be sent to one or other of the following gentlemen, who have kindly consented to act as treasurers for their respective localities, viz.:—Dr. James Finlayson, 2, Woodside-place, Glasgow; Professor Chiene, 26 Charlotte-square, Edinburgh; and Professor William Rose, 17, Harley-street, London, W.

I have the honour to remain, Sirs, yours faithfully,

J. FREDK. W. SILK,
Hon. Secretary, Lister Testimonial Fund.

29, Weymouth-street, Portland-place, W., Sept. 28th, 1894.

THE HYDERABAD COMMISSION AND A RECENT DEATH UNDER CHLOROFORM.

To the Editors of THE LANCET.

SIRS,—The following details of a recent death under chloroform appear to prove, in so far as "a highly technical negative"[1] can be proved, that the administration of chloroform is not always safe, even though the respiration be not interfered with. A female aged thirty-seven was given chloroform to facilitate the reduction of a dislocation of the shoulder of over two days' standing. The heart sounds were normal. The chloroform was given on an ordinary wire mask covered with flannel. For about thirty seconds the patient breathed naturally, though somewhat rapidly; there then ensued a short and not severe struggling stage, during which the administration was slackened; she then sank gently back upon the pillow, breathing quietly and deeply. In a few seconds more the breathing ceased with *absolute suddenness*. The pulse was then found to be absent, nor could the heart sounds be heard. The respiration had been in no wise interfered with; the woman was in bed loosely dressed; she had no false teeth, nor had she vomited, nor had the tongue fallen back against the palate. Artificial respiration carried on for over half an hour, the injection of alcohol, and inversion were all useless. The woman had died suddenly. To show how carefully the breathing had been watched, I may say that in discussing the matter afterwards with my surgical colleague I had to ask him whether or not he had commenced any attempts at reduction; as he had merely lifted the arm once and slightly rotated it I do not think that death was caused by shock from pain due to imperfect anæsthesia. From the commencement of the anæsthesia to the fatal result the amount of chloroform used (Duncan and Flockhart's, sp. gr. 1·497) was about seventy minims. Afterwards we ascertained that the woman was a chronic alcoholic subject and had just concluded a ten days' drinking bout (a fact concealed beforehand). Considering the known effect of chronic alcoholism in causing fatty infiltration or even degeneration of the cardiac muscle, it seems only reasonable to assume that paralysis of the heart had, at any rate, as much to do in causing death as paralysis of the respiratory centre. In the light of such cases as this and others recorded of late, it is impossible to share Surgeon-Lieutenant-Colonel Lawrie's[2] faith in the perfect safety of chloroform if only the respiration be not interfered with. The lesson that such a case teaches is that unimpeded respiration may permanently cease with such absolute suddenness as to render futile the most careful watching.

I am, Sirs, yours faithfully,

E. LE CRONIER LANCASTER, M.B., B.CH. Oxon.

Swansea, Oct. 2nd, 1894.

[1] THE LANCET, Sept. 22nd, 1894.

MARRIAGE AND SYPHILIS.

To the Editors of THE LANCET.

SIRS,—For the purpose of securing reliable statistics on the subject of the marriage of syphilitics I desire to enlist the assistance of those of the readers of THE LANCET who have had experience which would be of value in determining the period when this disease ceases to be communicable and inheritable. I shall, therefore, esteem it a great favour on the part of any physician who will send me answers to the following questions, and due credit will be given in a future publication to those who desire to aid me in this work:—

1. What is the latest period from the date of the initial lesion that you have known the disease to be communicated by a patient who has been from the first under your observation?

2. What is the latest period from the date of the initial lesion that you have known (*a*) a syphilitic man, or (*b*) a syphilitic woman, to become the parent of a syphilitic child?

3. Have you ever known syphilis to be either communicated or handed down at a later period than four years from the date of initial lesion by an individual who has been constantly under your observation during that time?

In the answers to these questions I should like a brief but complete history of each case, and an account of the treatment that has been pursued. I hope by this means to obtain the experience of a large number of observers and to reach a fairly reliable conclusion as to the time when we may safely permit our syphilitic patients to marry.

I am, Sirs, yours truly,

BURNSIDE FOSTER, M.D.

St. Paul, Minnesota, U.S.A., Sept. 20th, 1894.

A "CONTRÔLE DES PRODUITS ALIMENTAIRES."

To the Editors of THE LANCET.

SIRS,—On my return from the International Congress of Hygiene and Demography at Budapest, I find in THE LANCET of Sept. 8th a communication from one of your special correspondents concerning my conclusions on food control. Your correspondent has not quite correctly rendered those conclusions. I did not say that public analysts should receive State-paid wages. This is an axiom which need not be said again in congresses. I merely pointed out that the public should help itself by creating for its manufacturers, wholesale merchants, and importers a private system of control, supported by private means. I have introduced this system in Holland now about thirteen years, and the public and the trade are highly satisfied with it. It is based on the fact that articles

[2] THE LANCET, Sept. 8th, 1894.

of controlled firms can be sent for analysis free of charge to the chemist who controls the produces. The aid of the State is doubtless necessary in the retail trade, but I am a great enemy of the system by which self-help is excluded and by which as much as possible is left to the "almighty State." I am, Sirs, yours faithfully,

P. F. VAN HAMEL ROOS,
Chief Editor of the *Revue Internationale des Falsifications*.
Amsterdam, Sept. 25th, 1894.

*** Dr. van Hamel Roos does not now make quite clear what he is advocating. Is the State to pay chemists to make gratuitous analyses, or is the public to be at the expense of control analyses?—ED. L.

EPILEPTIFORM FITS IN CARDIAC DISEASE.

To the Editors of THE LANCET.

SIRS,—The following case supplements Dr. Bristowe's examples narrated in your last week's number:—A man aged sixty-four, engaged in the City. When twenty-five he is said to have had some left side paralysis following a fit, but was at work within a week of the attack; otherwise has had good health. On Feb. 17th, on getting out of the train at the station, he turned giddy, made for a seat, lost himself, and fell on his face, much bruising himself. I saw him within a few minutes. He had recovered consciousness; there was no paralysis; his pulse was 25; he had no cardiac murmur, no missed beats, rather hard arteries. I had known him for years, and should certainly have been aware of any habitual slow pulse. He had no albumen or any apparent cause for slow heart action. In a few days his pulse settled down to a steady 38. He had another fit when standing on April 10th, and another when sitting on July 13th, but was not seen until some time after the attacks. He fell down in another fit on Aug. 14th. My friend, Mr. Gerald March, saw him shortly after, and found his pulse 25 to 28. Next day he was well again, and his pulse had returned to 38, and at this rate it now continues. He has some slight faint feeling before the attacks. He becomes pale in colour, and has slight convulsive movements. There is no epilepsy in the family, either his own children or his parents. He is treated with iron, bromide, strychnia, and arsenic, and says he feels quite well.

I am, Sirs, yours faithfully,

Hornsey-lane, Sept. 26th, 1894. EDWARD CALTHROP.

"A DANGER OF THE ELASTIC TOURNIQUET."

To the Editors of THE LANCET.

SIRS,—In reply to your correspondent, "A Medical Officer," whose letter appeared in THE LANCET of Aug. 4th of this year, I beg to submit the following extracts from a case report. On Jan. 17th, 1893, I excised the left elbow-joint of a slight and spare, but healthy, young woman (aged twenty) for ankylosis in a useless position, which was due to an injury received in the previous July, 1892. The anæsthetic employed was ether, and a round but hollow Esmarch's band was applied just about the insertion of the deltoid muscle. The Esmarch's band was in position for possibly half an hour (not more), and the operation was completed to my entire satisfaction. At my visit next day my attention was called to a condition of profuse perspiration of the hand and wrist. (The forearm was enveloped in the dressings.) Further investigation showed that there was complete paralysis of both sensation and motion in the hand. On the 20th, three days after the operation, the dressings were removed for the first time. The wound looked typically well, but there was a red swollen mark around the arm where the band had been applied. Paralysis of motion was absolute and of sensation almost complete below the mark above referred to. The very first sign of return of movement appeared in the thumb and three outer fingers on Feb. 7th, twenty-one days after the operation, and on Feb. 28th, six weeks after the operation, there was only slight and feeble movement of the fingers and the wrist. Within the next two months this patient recovered perfectly and wrote to me that she had an excellent arm as a result of the excision. Electrical treatment was employed after the fifth day. There was no reaction of degeneration shown at any time by the faradaic current.

I am, Sirs, yours faithfully,

Montreal, Sept. 13th, 1894. JAMES BELL.

"CONSULTANTS' DIFFICULTIES."

To the Editors of THE LANCET.

SIRS,—Referring to the letters upon this subject which have recently appeared in THE LANCET,[1] I would ask, Is there any professional or public good in having a code of medical ethics? If so, is it right for one medical man, be he consultant or general practitioner, willingly to examine, advise, or prescribe for a patient of another, while under care and treatment, without the knowledge or consent of the practitioner in attendance—cases of emergency of course excepted? According to the code of ethics of some of the so-called consultants of to-day they may steal a horse (or rather a patient) while a general practitioner may not look over a gate. Whether for good or evil, this is an age of specialists, of various degrees of eminence and worth, and if a general practitioner's patient is not quite satisfied with the progress of his case he often feels disposed, or is recommended by some friend, to have other advice, and without mentioning the matter to his medical attendants he goes to a so-called consultant or specialist for a second opinion. What happens? He is at once received, not only without question, but, so to speak, with open arms, although this consultant must be aware, from the history and nature of the case, that previous medical advice has been sought and obtained. The inquiry as to whether he is under any brother practitioner's treatment is avoided, or if the fact is alluded to it is ignored, the patient is prescribed for and told when to come again, or he is advised to come for treatment into a medical or surgical home, or, as in some cases, the so-called consultant turns general practitioner and visits the patient at his home, taking charge of the case, to the detriment of the *bonâ-fide* general practitioner. Again, a general practitioner sometimes accompanies a patient to obtain the opinion and advice of a consultant or specialist, whom perhaps he has recommended; he afterwards finds that the patient goes alone to the consultant and is received, examined, and prescribed for without any reference to, and of course to the detriment of, the general practitioner. I write thus after many years' professional experience in London, and I am informed by medical friends that their experience is similar. Such conduct is either right or wrong: if it is right why should any medical practitioner be trammelled by obsolete notions of professional etiquette? why not attend anyone's patient if requested, and ignore our professional brethren? If it is wrong, in my opinion the best and only cure will be proper ventilation of the grievance by publicity, the due detailing in the medical journals of the circumstances, when they come to the knowledge of the aggrieved practitioner, giving the name of the offending consultant or specialist. Malignant diseases often require strong and caustic remedies.

I am, Sirs, yours faithfully,

Sept. 25th, 1894. SCALPEL.

[1] THE LANCET, Sept. 15th, 1894.

NURSES' "DIPLOMAS."

To the Editors of THE LANCET.

SIRS,—My wife recently engaged a nurse for an infant three months old. After being engaged the young woman appeared in the uniform of a hospital nurse. On my asking what hospital she had been trained in she replied that she had been examined by Dr. —— of ——, and that she held a "diploma," a copy of which document I enclose. The gentleman who grants this "diploma" appears in the "Medical Directory," but he does not seem to be connected with any hospital or to hold any teaching appointment. Surely this sort of thing should be discouraged. I enclose my card and am, yours faithfully,

Sept. 27th, 1894. F.R.C.S.

DIPLOMA.

I hereby certify that ——— has attended my course of instruction in Midwifery and Diseases of Women and Children, and that I have this day duly examined her in these subjects and find her capable of undertaking the duties of a midwife or sick nurse, medical and surgical. In testimony of which I hereto affix my hand and seal this —th day of ———, 18—.

Signed ———

ROYAL HOSPITAL FOR DISEASES OF THE CHEST.—Messrs. Coutts and Co. have sent £25 towards the sum of £2000 urgently required by the Royal Chest Hospital in the City-road.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

Quarterly Report of the Medical Officer of Health.

DR. NIVEN'S report for the second quarter of this year is, on the whole, satisfactory, as showing a gradual improvement in the health conditions of the city. The births were equal to an annual rate of 32·7 per 1000, against 35·1, the corrected average of the quarter for the previous three years. The old township, the most unhealthy and most densely populated part of the city, heads the list with a birth-rate equal to 33·6 per 1000. In North Manchester it was 32·4 and in South Manchester 32·2. The birth-rate for Manchester—32·7—is higher than the average in the thirty-three large English towns of the Registrar-General, which was 30·4 per 1000, and higher than that of London, which was 29·5. In Edinburgh the birth-rate was 28·7, in Glasgow 34·3, and in Dublin 29·4. Of general sickness 10,324 fresh cases were treated at the public hospitals and dispensaries of Manchester during the last quarter, a decrease of 104 cases as compared with the number treated in the second quarter of 1893. Of the total number, 1297 were in-patients, 7148 attended as out-patients, and 1879 were visited at their own homes. Of infectious sickness 912 fresh cases were notified to the medical officer of health as compared with 750 in the first quarter of the year, and with 704, the corrected average for the second quarter of the previous three years. They included 195 cases of small-pox, 498 of scarlet fever, 118 of diphtheria, 8 of membranous croup, and 18 of puerperal fever. Small-pox, which had almost died out, showed a considerable increase, 195 cases being notified last quarter, against 16 in the first quarter of this year and 4 in the fourth and 15 in the third quarter of 1893; but the numbers did not reach those of the second and first quarters of 1893, which were 215 and 385 respectively. The reported attacks last quarter were equal to an annual rate of 1·50 of the population of the city. In North Manchester they were equal to a rate of 2·89, in the Manchester township to one of 2·07, and in South Manchester the rate was only 0·38 per 1000. Fifteen cases were fatal. No information is given as to previous vaccination in these cases. Of scarlet fever the notified attacks equalled an annual rate of 3·83 per 1000 persons living, as compared with 3·44 in the first quarter of this year and 2·75, the average rate for the second quarter of the previous three years. It was relatively most prevalent in South Manchester, where the rate was equal to 3·98 annually per 1000 of the population; in North Manchester the proportion was 3·94 per 1000, while in the Manchester township it was 3·46. In London the rate was 4·55 last quarter, while in the twelve selected notification towns in this part of England it was 4·18, ranging from 1·14 in Blackburn to 7·44 in Liverpool. Diphtheria was slightly less prevalent than usual last quarter, the reported attacks being equal to a rate of 0·97 per 1000, as compared with 1·04, the average rate for the second quarter of the three previous years. It was proportionately most prevalent in North Manchester, where the rate of attacks was 1·50, while in the township it was 0·87, and in South Manchester 0·73. In London the diphtheria rate was 2·62, while it was not more than 0·42 in the twelve selected notification towns. Enteric fever was less prevalent than in the corresponding quarter of 1893. The notified cases equalled an annual rate of 0·58, against 0·83, the average for the June quarter for the previous three years. The rate was highest—0·70—in South Manchester, and was lowest—0·46—in the Manchester township. It averaged 120 in the twelve selected towns, ranging from 0·24 in Huddersfield to 2·73 in Liverpool. Measles and whooping-cough do not appear to have been excessively prevalent.

Hospital Isolation.

At the beginning of the quarter 273 Manchester patients were under treatment in the hospitals for infectious cases, and 643 were admitted in the course of the thirteen weeks. By the end of the quarter 494 were discharged cured, 52 died, and 370 remained in hospital. Of the reported scarlet fever cases 62 per cent. were removed to hospital, 20 per cent. of those of diphtheria and membranous croup, 56 per cent. of the cases of enteric fever, and all the small-pox cases.

Health Resorts and Infectious Disease.

Dr. Niven remarks that, though each autumn scarlet fever and other infectious fevers are frequently contracted by children taken to sea-side "health resorts," "it is not a little astonishing that heads of families continue to manifest so little solicitude that the quarters they select shall present a clean bill of health. . . . It is fortunate that at the most popular of our health resorts powers are already in operation for the compulsory notification of infectious disease, and visitors who are anxious for the safety of their families may accordingly obtain reliable information from the local medical officers of health." He has also placed the quarterly return of the Registrar-General in the Public Health Office, so that those who are contemplating a visit to the sea-side may, by a visit to that office, see a return of the deaths from infectious disease at the principal watering places.

Mortality.

The deaths for the quarter have been considerably below the average, the number being 2471, after making the necessary allowance for "institution deaths." They equal a "corrected annual rate of 19·0 per 1000 of the population of all ages estimated to the middle of the year." For the same quarter of the previous three years the rate averaged 26·9 per 1000; this year therefore it was below the mean for the quarter by 29 per cent. As usual, the rate in the Manchester township was highest, 24·6; in North Manchester it was 14·5; and in South Manchester 18·0 per 1000. The Manchester rate was, however, 1·6 higher than that of London and the thirty-three large English towns of the Registrar-General. The rate of mortality of infants under one year was 128 per 1000 in the second quarter, against 168 in the first quarter of 1894, and 166 in the second quarter of 1893, ranging from 96 per 1000 births in North Manchester to 163 per 1000 in the Manchester township. "Not fewer than 911 of the 2471 deaths at all ages were those of children under five years of age"; but even these were less by 24·4 per 1000 than in the second quarter of 1893. Among persons above the age of sixty-five years 331 deaths were registered, equalling a rate of 99·5 per 1000 of those living at that age. The Manchester township more than maintains its fatal prominence, the rate there being as high as 113·1, while in North Manchester it was equal to 72·9 per 1000. The zymotic death-rate for Manchester was 2·21, rather lower than the average. The mortality from phthisis equalled 2·30 in the city generally, but in the Manchester township it rose to 3·44 per 1000. This district does not consist entirely of slums. Many of the principal business streets, both of shops and warehouses, are included within it, so that the area occupied by dwellings is considerably reduced, and its unhealthy conditions are by so much intensified. Great changes must take place in the character and habits of the dwellers therein, as well as in their physical surroundings, before it ceases to be a reproach to the city as its specially unhealthy area.

Oct. 2nd.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

Mason College.

THE inaugural meeting of the college for the present session was held on the 1st inst., under the presidency of Mr. Oliver Pemberton. The address was given by Professor Dixon, the newly elected Professor of English Literature, and was listened to with marked attention by a large attendance of students and friends.[1] The Principal, Professor Heath, alluded to the changes made in several departments of the college—the retirement of Dr. Tilden and the election of Dr. Franklin as Professor of Chemistry. The appointment of Professor Dixon in the place of Mr. Arber, who had been made Emeritus Professor, was noted with acclamation. It was pointed out that the council contemplated a department devoted to the training of primary and secondary teachers, the scheme involving ultimately the appointment of a Professor of Education. The president distributed the prizes, Dr. Rickards announcing the result of the clinical examinations. In the evening a conversazione was held, and interesting exhibits, concerts, and a theatrical entertainment provided amusement for a large number of guests.

The General Hospital.

The festivities attending the laying of the foundation-stone of the new hospital realised the utmost expectations of the promoters. The proceedings elicited universal praise for the

[1] This address is printed in full in our present issue.

careful and accurate manner in which the programme was carried out, while the loyalty exhibited by the vast crowds must have been gratifying to the Royal personages who performed this distinguished duty. After such an amount of enthusiasm naturally comes reaction, the authorities settling down to the routine of daily work. In this less exciting phase of work is to be noted a succession of fresh appointments. The matron, Miss Allen, after a successful administration of several years, has resigned her post. The resident surgical officer, Mr. Gamgee, has been promoted to the vacant assistant surgeoncy; the resident medical officer, Dr. Perry, retires, and his resident surgical assistants seek for places. With all these there is much competition of a spirited and vigorous kind, which leads to the hope that the successors in the several posts will be at least as capable as those who have preceded them.

The Musical Festival.

The triennial festival in aid of the funds of the General Hospital commenced on Tuesday morning by the performance, as usual, of the "Elijah." The number of tickets applied for at the several meetings, morning and evening, for the four days has quite come up to that of former occasions. Several new and important works have been introduced, and under the able conduct of Dr. Richter it is expected that a substantial sum will accrue as the result.

Queen's Hospital.

The arrangements made for the reconstruction of the operating theatre, so generously aided by the Earl of Dudley, have been carried out in a complete manner so as to give general satisfaction. The alterations will greatly facilitate the work of the hospital and add materially to the expedition and comfort of the operations. At a meeting of the board of governors lately held it was unanimously resolved that it is desirable to recognise in a permanent form the valuable services rendered to the hospital by Mr. G. J. Johnson (the Mayor), as honorary solicitor of the charity, and a member of the committee during the long period of thirty-two years over which his connexion with the hospital has extended; that such recognition shall take the form of a portrait to be placed in the board-room of the hospital, together with a replica of such portrait to be presented to Mrs. Johnson. A special committee was appointed for the purpose of carrying out this resolution.

Oct. 3rd.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

The University of Durham Medical College, Newcastle.

THE winter session of the University of Durham Medical College at Newcastle was inaugurated yesterday. Professor Philipson, president, opened the proceedings in the presence of the Mayor of Newcastle, the warden of the university, and the Earl of Durham, who distributed the prizes. The president stated that during the past year 220 students had attended, of whom 120 were proceeding to degrees. The premier positions in the army and navy examinations had been attained by students of the college. The Very Reverend Dr. Lake, Dean of Durham and warden of the University, addressed the students and intimated to them that it would be the last occasion upon which he should have the pleasure of doing so.

Newcastle Natural History Society.

About 20,640 persons have paid for admission to the museum during the present financial year, being a decrease of about 1600, which, as the attendance at holiday times was much better than in 1893, indicates a continued diminution in the attendance of the general public. It was suggested at the annual meeting that prizes should be given for collections of natural history to be arranged and classified by the exhibitors, and that the collections should be exhibited at the museum for a certain period.

Small-pox and Vagrancy: South Shields.

Dr. Turnbull, medical officer of health, says that during the first six months of the year, not taking into account the six cases in the hospital remaining over from the previous year, there was a total of forty-five cases of small-pox. They were all traced to eleven imported cases, seven to vagrants, and four to seamen. Dr. Turnbull says: "The whole brunt of the epidemic falls upon the vagrants; all of these men had of course been in the town, for although the workhouse is outside the borough boundary it is necessary for them to journey to the heart of the town to obtain the necessary ticket." In this matter the experience of Newcastle, as set forth in Dr. Armstrong's report, is repeated in South Shields. It indicates unmistakably that vagrancy is a danger to the public at large in a sense quite different from that in which it is generally regarded.

Drowning Traps.

The coroner has held an inquest at West Hartlepool touching the death of a child two years of age. It appeared that the child went out to play. Afterwards it was found in a lime tub sunk into the level of the surrounding ground and containing water up to the brim. The child was taken out dead. The jury found that deceased was "accidentally drowned in a builder's lime tub," and added a rider, with which the coroner concurred, condemning the practice of sinking these tubs to a level with the ground, as dangerous alike to children and grown-up people.

Death of Dr. Mitchell of Hebburn.

I regret to announce the death of Dr. Robert Mitchell, medical officer of health of Hebburn-on-Tyne, which took place on Sept. 21st at his residence, St. Mary's, Hebburn. The deceased gentleman, who was a native of Selkirk, was in his thirty-fourth year. He studied for the medical profession and took the degrees of M.A., M.B., C.M., at Edinburgh University. Seven years ago he came to Jarrow as house surgeon at the Memorial Hospital. Subsequently he removed to Hebburn, where he made a large private practice. The deceased gentleman was widely known and highly respected.

Stockton Sanitation.

At the meeting of the Stockton urban sanitary authority the medical officer, Mr. Clegg, reported: "Since the last meeting forty-eight cases of scarlet fever have been notified to exist. The disease is in many cases unrecognised, as no medical man is called in to attend, the patient showing so little signs of the mischief. It is spread to a very large extent in this manner. Three cases only of this disease have been discovered and reported after having been in existence some weeks and meanwhile mixing with and infecting other children."

Newcastle-on-Tyne, Oct. 3rd.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

The Sanitary Inspectorship of Leith.

IT has been mentioned here from time to time that there had been much friction in the public health department in Leith. Among other things, charges were made by the medical officer of health against the sanitary inspector, and these had been investigated by a committee of the town council. The town council thereafter appealed to the board of supervision for advice, and the board sent its inspector to inquire into the matters referred to. The outcome of this inquiry was that the board recommended that the sanitary inspector should be asked to resign, and, failing his doing so, the board promised to approve of the town council relieving him of his duties. The sanitary inspector, in view of the decision of the board, tendered his resignation to the town council, which was accepted. At the same time the council voted a sum of £50 to him. The post is now vacant and is being advertised, and it is satisfactory to know that the new inspector is to be under the direction of the medical officer of health. The necessity for such an arrangement has been pointed out here on several occasions, and Leith may be congratulated on making an arrangement that must sooner or later be made in all sanitary districts.

The Opening of the Winter Session in Edinburgh.

The winter session of the medical classes will open on Tuesday next, the 9th inst. Most of the members of the teaching staffs, both in the University and the extra-mural school, have returned to town. There does not promise to be anything of special note beyond the fact that the junior classes are almost bound to be considerably diminished in numbers as compared with past years, for the new regulations for the Preliminary Examination are, for the present at least, sure to prove a serious impediment to many men entering upon medical study with a view to graduation. In the extra-mural school the most noteworthy change is the opening of new lecture-rooms in Bristo-street. Most of the lecturers who are to occupy these were formerly accommodated in

Park-place, but when it was acquired by the University they had to make other arrangements, and these new premises are the result.

The University New Buildings.

The McEwen Hall is rapidly approaching completion, and promises to be probably the first hall in Scotland. The hall and the new buildings can only be seen to advantage by the removal of the great block of dwelling-houses that formed one side of Park-place and part of Bristo-street. As these houses gradually disappear it becomes apparent that the medical school, with the McEwen Hall and the Students' Union, will form one of the most imposing blocks of building in the city. The public spirit of the town council is shown by their action in buying this property and adding to the amenities of this part of the town and of the medical school by removing the houses upon it and making it an open space.

Medical Education of Women in Glasgow.

In the bustle of preparation for the coming winter session some attention is being directed to the provision made for the medical education of women in Glasgow. In Queen Margaret College presumably the old faulty arrangements of previous years will be continued, but this apparently is not preventing the Muirhead Trustees from going on with their task of establishing a fully equipped medical school for women in close association with a general hospital reserved for women students only. The trustees have practically completed the purchase of a large mansion within two minutes' walk of the Victoria Infirmary, a house which, with little alteration, will make a capital school. When this scheme has been fully carried out, and proper terms arranged with the governors of the infirmary, the University authorities, who now have sole control of Queen Margaret College, will doubtless see their way to the only reasonable solution of the women's medical education difficulty in this city—namely, amalgamation of Queen Margaret College with the Muirhead College—by detaching the entire medical faculty of the former college and sending it south to the Muirhead school, thus leaving the institution in the west for the study of literature, art, law, &c. This view of the situation, which is distinctly gaining ground in Glasgow, even in University circles, where it was at first scouted, is that which has been advocated in these columns for some years. The University will confer substantial benefits on itself, on the whole community, and on the cause of women's medical education by adopting it heartily. It seems to be the only way of preventing the unseemly spectacle of two well-endowed colleges contending for the privilege of instructing a comparatively small number of students; while such an amalgamation as is here suggested would result in the founding of one strong school, with facilities for the clinical training of women unequalled in Britain.

Faculty of Physicians and Surgeons.

At the recent meeting of the Faculty Dr. Bruce Goff of Bothwell was nominated for the Presidentship. The Faculty could not do a more graceful act than confirm this nomination, in recognition of the eminent services of Dr. Goff, not only to the Faculty itself, but to the whole profession in the West of Scotland.

The Victoria Infirmary.

The friction and general unpleasantness which have marked the management of this institution for some time culminated in the resignation of the medical superintendent and matron, followed naturally by that of the chairman of the house committee. A new matron has already been appointed (Miss Macfarlane), who goes from Barnhill Hospital to her new field of work with an excellent reputation. More difficulty is experienced in fixing on a superintendent, the governors being apparently somewhat hard to please; fresh advertisements have been issued offering a notable increase of salary in the hope of attracting a sufficiently promising array of candidates.

Oct. 2nd.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Outbreak of a Strange Disease—Beri-beri?

A DISEASE of a peculiar nature has been prevalent for some weeks past in the Richmond District Lunatic Asylum, which has attracted the attention of several physicians. It is characterised by lassitude and loss of muscular power, and appears to be of a virulent character, some thirteen cases having proved fatal in the past five weeks. The medical officers of the asylum have isolated the patients attacked, and a special inquiry will be held to trace how the disease was introduced into the asylum. The affection is believed to be identical with beri-beri.

Hospital Saturday, Cork.

On last Saturday collections were made in various parts of the city in aid of the Cork hospitals. The movement commenced in 1891, when £329 were collected. In the following year £358, in 1893 £360, and this year £389 were obtained, so that the amount has been increasing year by year. There were thirty stations, and the exertions of the ladies were very successful, one lady receiving £50. In addition to the street collections, the Cork Steam Packet Company contributed £111. Other firms have had collections among their employés, but the returns have not yet been sent in.

The Meath Hospital, Dublin.

On Monday next, the 8th inst., the introductory address at the opening of the session 1894-95 will be delivered by Sir William Stokes, Surgeon-in-Ordinary to Her Majesty in Ireland.

Coombe Lying-in Hospital.

The governors, on the nomination of the Master of this hospital, have appointed Mr. Thomas G. Stevens as assistant master for three years.

Charitable Bequests.

Mrs. Elizabeth Humphreys has bequeathed £100 to the Mater Misericordiæ Hospital, £60 to the Hospital for Incurables, £100 to Jervis street Hospital, £100 to St. Joseph's Hospital, £60 to Mercer's Hospital, and £100 to St. Vincent's Hospital.

Medical Magistrate.

Dr. J. C. Hall has, on the recommendation of the Right Hon. the Earl of Dartrey, Lord-Lieutenant of the county Monaghan, been appointed to the Commission of the Peace for Monaghan.

Queen's College, Belfast.

On Monday, Oct. 1st, Rev. Dr. Hamilton, President of Queen's College, and six of the professors appeared as a deputation before the City Council with reference to the Botanic Gardens. The President showed how the numbers at the college were increasing, so that, while during the first ten years of its existence the average annual attendance was 189, in the last decade the average annual number had risen to 473. This progress in numbers involved the extension of the boundaries of the grounds purchased fifty years ago. New buildings had been erected; this year a new one devoted to chemistry had been opened, and they would shortly commence the erection of two others, a physiological laboratory and the Students' Union. That the progress of the college would continue they all believed, and personally he looked forward to the time when, instead of a college in Belfast, they would have what they had in Dublin, and when Queen's College, Belfast, would be the seat and mother of the University of Belfast. When that time came it would be even more necessary that they should have a larger space of ground at their disposal than at present. Now the college grounds were bounded by roads on all sides except one—towards the Botanic Gardens—and as the City Council were about to acquire these gardens for a public park, and as they had the right by Act of Parliament, the President asked that a fourth part of these grounds might be put at the disposal of the college, to be purchased by the college authorities at a rateable fourth of the price which the corporation are paying for the whole. A member of the City Council, Mr. Otto Jaffe, has offered to become surety for this purchase money, and, indeed, is prepared to pay down to the corporation the money until the college authorities could recoup him. By this addition to its grounds the college would acquire four and a half acres. The deputation was received in the most friendly manner. After the deputation withdrew it was decided to purchase the Botanic Gardens for a public park at the cost of £10,500. The application of Queen's College is afterwards to be considered.

University Extension.

A meeting of citizens of Belfast was held in connexion with this movement at Queen's College on Monday, Sept. 24th, the President in the chair, when the Marquis of Dufferin and Ava

delivered one of those literary and cultivated addresses for which he is so famous in support of the movement.

Royal Hospital, Belfast.

Dr. Dorman has been elected house surgeon in place of Dr. Colville resigned.

Health of Belfast.

The health of the city at present is good, the death-rat being lower than during the previous month.

Oct. 2nd.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Cremation in Paris.

THIS form of disposal of the dead is practised in Paris only at one cemetery—viz., Père La Chaise. Here a furnace was installed in 1889, but, taking into account the population of the capital, its work has been limited. This is easily explained by the opposition of the Roman Catholic Church to the practice. Since 1889 the bodies of only 810 persons have, in fact, been burned here. The yearly increase may, however, be noted, for the figures read: 1889, 49 cremations; 1890, 121; 1891, 134; 1892, 159; 1893, 199; 1894 (up to July inclusive), 148. More than three-fourths of these incinerations were gratuitous, the subjects thereof being persons who had died in the hospitals, and whose bodies had been cremated at the request of their relatives. But the furnace is used for yet another purpose—viz., the disposal of the débris of the post-mortem rooms and anatomical theatres of the Faculty. Still-born children are also thus disposed of. At my last visit I saw an employé empty a sack of its contents, which consisted of boxes enclosing fœtuses. This latter category is more numerous than the first-mentioned, there having been burnt since 1889 the bodies of no less than 6288 stillborn infants, and débris representing 11,222 bodies. In looking over the names inscribed on the tablets in the Columbarium I noticed those of several of our own compatriots.

The New Treatment of Diphtheria.

Inoculations with anti-diphtheritic serum are now systematically practised at the two children's hospitals—Trousseau and Enfants-Malades—under the direction of MM. Roux and Martin of the Pasteur Institute. The authorities of the institute are desirous of supplying the new remedy to every practitioner in France, but, unfortunately, financial considerations block the way. A correspondent of the *Figaro* having been assured that funds for this praiseworthy purpose would be gladly accepted at the establishment in the Rue Dutot, that go-ahead journal has opened a subscription with this intent.

The Cost of Disinfections in Paris.

The Prefect of the Seine has decreed, in conformity with a resolution passed by the Municipal Council, that the charge for disinfections effected by means of the municipal furnaces shall be regulated according to the following tariff: Where the rent of the *locale* is below 800 francs a year, gratis; rent, 800 to 999 francs, 5 francs; 1000 to 1999 francs, 10 francs; 2000 to 2999 francs, 15 francs; 3000 to 3999 francs, 20 francs; 4000 to 4999 francs, 30 francs; 5000 to 5999 francs, 40 francs; 6000 to 6999 francs, 50 francs; 7000 to 7999 francs, 60 francs; 8000 to 9999 francs, 80 francs; 10,000 to 14,999 francs, 100 francs; 15,000 to 19,999 francs, 150 francs; and for rents of 20,000 francs and upwards 200 francs. This charge will include the removal and return of movable articles to the furnace and the purifying of the apartment, and, however often during the same illness the disinfecting process may be repeated, no charge beyond the above-mentioned will be made.

Risks in wearing Artificial Eyes.

In a clinical lecture delivered recently at the Hôtel Dieu Professor Panas entered a protest against the abuse of enucleation of the eye so frequently met with in hospital practice. The deformity caused so generally by the operation is most prejudicial to the interests of the poor patients, who are thus debarred from taking situations otherwise open to them. But Professor Panas goes further by accusing the operation of provoking the very disease against which it is practised—viz., sympathetic ophthalmia—which, he states, is infinitely less common than is represented. In effect, the poor wearer of a glass eye runs great risks of inducing sympathetic trouble in the healthy eye from neglect of cleanliness in the artificial organ. From this cause the orbit becomes filled with pus, ulcers develop, and cicatricial bands form. Again, the artificial eye may be fractured, and, having only one, the patient continues to wear an article the ruggedness of whose broken surface is a source of continual irritation. Wearers of an artificial eye frequently present eversion of the lower lid; in others entropion and trichiasis are observed. To avoid these inconveniences Professor Panas insists on the supply of two artificial eyes. At night the eye should be placed in a solution of corrosive sublimate or carbolic acid. To obviate difficulty in its introduction into the orbit, it should be previously lubricated with boric vaseline or glycerine. The best means of preventing the formation of cicatricial bands is the complete suture of the conjunctiva at the time of the operation of enucleation. When bands have formed, autoplasty should be had recourse to, the flap being taken from the neighbourhood of the eye and not from a distant part of the body (heteroplasty).

Oct. 2nd.

RUSSIA.

(FROM OUR OWN CORRESPONDENT.)

Proposed Medical Faculty in the University of Odessa.

THE city of Odessa has possessed a university, known as the Novorossiisk, or New Russian, University since the year 1865, but up to the present there has been no medical faculty in connexion with it. Last year a commission was formed to consider the question of instituting such a faculty, and the report of the commissioners has recently been published. It asserts that the site upon which it was proposed to build the clinique is much too small for the purpose, and puts forward a scheme which should place the Odessa University on a level with the other Russian medical schools as regards facilities for teaching. The scheme includes a clinique, to be built upon the same lines as that in Moscow, and to contain 225 beds. These are to be distributed as follows: 40 surgical, 40 medical, 40 obstetric and gynæcological, 30 for observation, 20 for children's diseases, and 20 for diseases of the eye. (These figures, however, only account for 215 beds.) The sum required for building the clinique alone is stated to be 1,125,000 roubles, or over £120,000. The commissioners anticipate that about 300 students will enter the new faculty at first.

A Pirogof Museum.

The Russian Chirurgical Society, in memory of Pirogof, intends to open next year a surgical museum in St. Petersburg, to be also called after the famous Russian surgeon. The building will be on the banks of the Neva, close to the Military Clinical Hospital.

Inoculations against Anthrax.

Pasteur's method of prophylactic injections against anthrax has recently been practised on a considerable scale in Russia. It has now been decided to open a laboratory in St. Petersburg for the preparation of the vaccine. The French Société du Vaccin Charbonneux de Pasteur is also constructing one in Nijni Novgorod, and proposes later to build similar laboratories in the Caucasus and in Southern Russia.

The Cost of Hospital Patients in St. Petersburg.

In the ten municipal hospitals of this city the number of in-patients treated last year was 60,517. The average stay of each patient in hospital was almost exactly thirty-two days. The total cost was 1,409,959 roubles. The average cost for each in-patient was, therefore, 23 roubles and 29 kopecks, or, at the present exchange, about £2 10*s*. The cost per bed was 265 r. 53 k., or about £28 10*s*. Seven of the hospitals had in addition out-patient departments, at which a total of 109,776 persons received free advice and treatment. The expenditure on this account amounted to 43,596 r. 60 k., which is equal to an average expenditure on each person of 40 kopecks, or under a shilling a head. In addition to these outlays the city authorities were called upon to expend 20,000 roubles for special expenses in connexion with the cholera epidemic. Their total outlay upon medical and sanitary matters came to over 1,800,000 roubles, or not very far short of £200,000.

The Cholera Epidemic.

The number of patients now under treatment for cholera in the St. Petersburg hospitals has sunk to 32. From 2 to 4 fresh cases still occur daily.

St. Petersburg, Sept. 16th (28th).

AUSTRALIA.

(FROM OUR OWN CORRESPONDENT.)

New Hospital at Sydney.

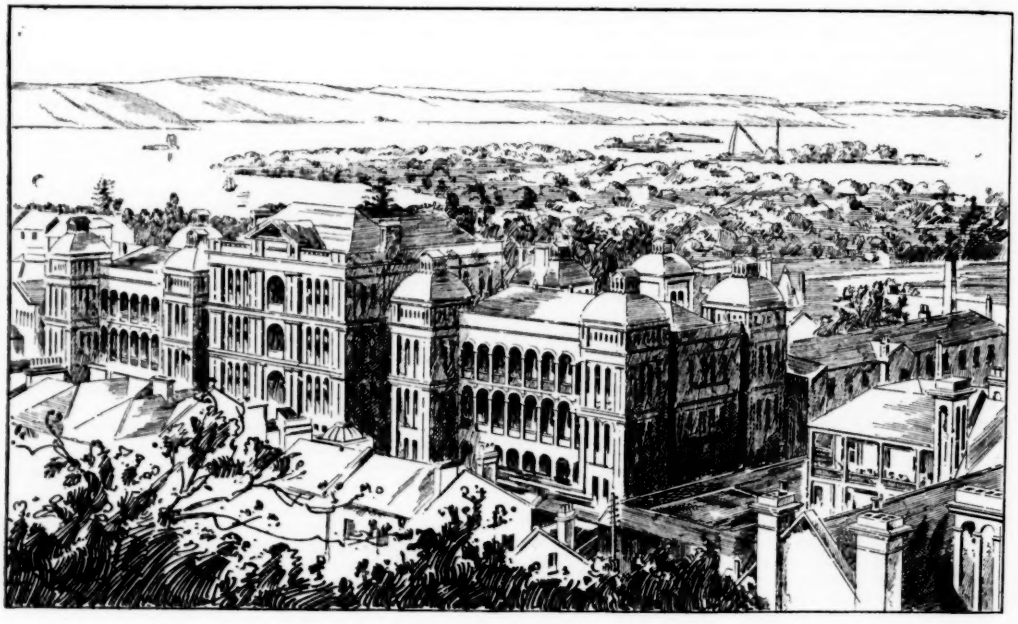
THE new buildings of the Sydney Hospital were formally opened by Sir George Dibbs on Aug. 10th last. The history of the Sydney Hospital has been somewhat chequered. It was originally founded by Governor Macquarie in 1811, on an area of seven acres of ground, in a position then regarded as "airy and delightful." The original building consisted of a centre block and two wings, the latter being subsequently utilised as the Mint and Parliament House respectively. In 1870 statements were made that the hospital buildings were insanitary and unsuitable, and they were partially pulled down, with the intention of building a new structure with the £20,000 collected from the public in commemoration of the Duke of Edinburgh's escape from assassination. The site, however, was then said to be unsuitable, as it was too small and too much crowded round with buildings, and the money was devoted to building the Prince Alfred Hospital. Continued disputes waged about the Sydney Hospital and its site. In 1879 the Board of Management called for competitive designs for a new and permanent building, the cost of which was not to exceed £45,000. Designs were approved, the foundation-stone laid, and building continued until £68,923 had been expended, but the walls as high as the first storey only had been erected. Work was then suspended, and disputes waged more hotly than ever concerning the advisability of continuing it. Finally, in 1890, the Legislation decided that the building should be completed. The new buildings form a palatial pile, and are arranged in five blocks, designed on the pavilion system, with a space of fifteen to twenty-four feet between the blocks. Verandahs and balconies extend along each side of all the wards. The floors are fire-proof and ventilation has received special attention. In all the wards Tobin's tubes and air-gratings are provided as inlets, while the foul air is exhausted by a Verity's hydraulic fan in each block. The drainage is on the separate system—the foul drainage going to the main sewer, the storm water to the harbour. The hospital now contains 250 beds, with an average cubic space per bed of 1500 cubic feet. The operating theatre is 32 ft. by 30 ft., and splendidly lighted from a domed roof. The portion of the building fronting Macquarie-street is in stone, the rest in brick, and the *tout ensemble* is very effective.

New Cottage Hospital for Western Suburbs, Sydney.

On Aug. 15th last his Excellency Sir Robert Duff opened a new cottage hospital situated near Ashfield. It is a pretty one-storeyed building in blocks. The ward block provides accommodation for six male and six female patients, while a child's bed has been provided entirely by funds collected by the children of the district, by whom it will be maintained.

New Cottage Hospital at Williamstown, Victoria.

The Williamstown Hospital, which has been erected by means of subscriptions by the townspeople, was opened on July 27th by the Hon. R. Reed. The design of the building is a free treatment of the Queen Anne style of architecture. There are two wards, each 21ft. by 14ft., and provision is made for three beds in each. The operating room, kitchen, and servants' quarters are at the rear of the main building, and ventilation and sanitation have been carefully arranged. The cost has been £1300, and it is intended to increase the accommodation to twenty beds.



The New Sydney Hospital.

Treatment of Hydatid Disease.

The August number of the *Australian Medical Journal* contains a long paper by Dr. W. Gardner on the Present Position of the Treatment of Hydatid Disease in Australia. After reviewing the discussions on the subject at the Melbourne and Sydney meetings of the Inter-colonial Medical Congress, and describing in detail the various methods in use, he concludes: (1) that while simple cysts of the liver are occasionally cured by tapping, this method is contra-indicated in almost all hydatids, because it cannot be told beforehand whether the cysts are simple or not, there is risk of death from shock, and a large number of cases have ultimately to be subjected to radical operation; (2) the radical operation, by incision and immediate removal of the parasite, is indicated in all hydatids of the external surface of the body; in all unruptured hydatids of the lung; in ruptured hydatids of the lung when a suppurating and freely secreting cavity is left; in all cases of hydatids of the abdomen, and of the brain, spinal canal, and orbit; but of the latter enough examples have not been seen to speak definitely. Of the operations for abdominal hydatids Volkmann's is recommended as best for the practitioner

who cannot obtain assistance; when assistance can be obtained stitching the cyst to the parietal peritoneum, then emptying the cyst and fixing it to the abdominal wall is advised. In rare cases complete removal of the sac can be done, especially in omental cases, and occasionally Bond's operation is advisable, in which case the author advises stitching the sac to the peritoneum on each side when possible. Dr. Gardner states that these conclusions represent the results of the practice of most surgeons in Australia who have devoted most attention to the disease, a statement which is open to question, for a considerable number would probably disagree with him in some particulars. Dr. Gardner also contributes a paper to the *Inter-colonial Quarterly Journal* on echinococcus cysts of the kidney, in which he discusses their diagnosis and treatment and records a case treated by Bond's method which he regards as "the ideal method of treatment for living cysts of the kidney."

Inter-colonial Medical Congres.

The next meeting of the Inter-colonial Medical Congress of Australasia will be held in Dunedin, New Zealand, in February, 1896. Dr. Batchelor is to be President and Professor Scott and Dr. Barnett are hon. secretaries. Arrangements are being made with the various steamship companies for reduced fares to members visiting the Congress.

Mortality of Sydney.

The Government statistician's report on the vital statistics of Sydney for July shows that the mortality was unusually high, and this is attributed to the return of the epidemic of influenza and partly to the cold westerly winds, which have had a fatal influence on many aged persons.

THE EIGHTH INTERNATIONAL CONGRESS OF HYGIENE AND DEMOGRAPHY.

THE EXCURSION TO BELGRADE AND CONSTANTINOPLE.

The Day at Belgrade.

(FROM A SPECIAL CORRESPONDENT.)

OF the many excursions planned by the organisers of the International Congress of Hygiene and Demography none seemed at once more ambitious and more attractive than the proposed journey to Constantinople. The matter was entrusted to the International Sleeping Car Company, and it was proposed to organise three special trains, to hold a hundred passengers each, and to start one hour after each other. One day was to be spent at Belgrade, five at Constantinople, and the whole excursion, including board on the train, lodging, and board at Constantinople, was to cost 228 florins 10 krs., or a little less than £20. Those who chose to return by sea *viâ* Corfu and Trieste, thus obtaining an opportunity of seeing Athens on the way, would pay 273 florins 10 krs. No board was allowed for the return journey by train. Unfortunately the numerical success of this expedition was marred by the sinister rumours concerning quarantine. In vain it was declared that the quarantine imposed by the Turkish authorities would last only twenty-four hours; many imagined that this might be altered at the last moment and the trains kept back for several days. Such delay would be not only extremely unpleasant and irksome, but also very expensive. Finally, the members entertained a wholesome dread of quarantine as a very efficient means not of preventing but of producing disease. For all these reasons those who had at first given in their names as intending excursionists backed out of the arrangement; and, finally, when the last day arrived there were only ninety members of the Congress willing to go to Constantinople, and forty-five to Belgrade. The train started late in the evening and reached Belgrade a little after seven o'clock on the following morning. As we neared the frontier several members of the Servian reception committee boarded our train and handed a printed programme to every person. To this programme was attached either the name of some Servian gentleman or of a hotel. On the platform at Belgrade a large number of Servian gentlemen were in readiness to receive us. The various names given with the programme were called out and small groups formed. Outside carriages were waiting, and a military band was playing a welcome. Each group, under the guidance of committee men, were taken to their hosts or their hotel. Together with five other members of the Congress I was conducted to the private house of M. Svetozar Gvozditch, who was recently Minister of Public Works. Here we were able to make our toilette, and then breakfasted with M. Gvozditch's family. Carriages were at the disposal of all the members, and we were driven off to see all the sights, always accompanied by a Servian cicerone who spoke the language of the member of the Congress to whom he was attached. M. Nicholas S. Iovanovitch, formerly Consul-General of Servia in Great Britain, was especially told off to take me under his care. All day long, with unceasing devotion, M. Iovanovitch accompanied me, explaining and interpreting all I desired to know. It would be difficult for me to express my sense of gratitude for this gentleman's untiring courtesy, nor can I easily forget the graceful and gracious hospitality of our host and hostess, M. and Madame Gvozditch.

It would take too much space to describe in detail all we did and saw during that well-spent and busy day, yet I am anxious to say sufficient to show how complete were all the arrangements ably made for our welcome, pleasure, and edification. First we drove to the cathedral of the Greek Orthodox Church and listened to a part of the gorgeous service, witnessing the crowning of the archbishop. From this new edifice we went to an old Turkish mosque and to the headquarters of the Red Cross Society. Here we found a great accumulation of stores required for the equipment of field ambulances. Everything was in perfect order and ready in the event of a sudden outbreak of hostilities. The members of the Congress, after complimenting the organisers of the Servian Red Cross Society, proceeded to the new Royal Palace, where all the doors were thrown open to them. From this point a long drive took us to the State tobacco manufactory, where we saw the whole process of cigarette-making, of tobacco-cutting, weighing, and packing, &c. Here and there, during certain processes, an excess of tobacco dust must have rendered the work unwholesome, but, taken as a whole, the factory workers, for the most part women and young girls, seemed to be fairly healthy. The regimental band, having followed us to this point, commenced playing Servian dance music, and then all the factory girls came out into the yard. Holding each other by the hand, they formed a long line; then, dancing a sort of jig step, they wound in and out, round and about the crowd of Congressists, who were pleased to see that the workpeople were having a share in the general holiday. Many of the factory girls wore native costumes and looked very picturesque, especially those who were selected to hand round to members of the Congress specimen cigarettes made in the State factory. After spending an hour or more at the factory a special train came up on the line close by and took us all to the park of Toptchidère, which is to Belgrade what Richmond is to London. Under the trees beer barrels had been broached for the benefit of the thirsty. After this light refreshment we proceeded to walk round the park, the old country seat of the King, and the historic ground where Prince Michael Obrenowitch was assassinated in 1868. At two o'clock a dinner-lunch was served under the shade of branches which had been spread overhead to form a sort of arbour. The *menu* was absolutely Servian, and we made acquaintance with dishes that were as nice as they were strange—notably, soup made with chicken, milk, paprika, and various aromatic ingredients. By this time our company was joined by a number of ladies, the wives and daughters of our hosts, and they were distributed among the tables according to languages. Thus there was the German-speaking table, the English-speaking table, the Magyar table, and so on. The ladies of Belgrade are wonderful linguists, many of them speaking admirably four or five languages; indeed, the facilities in this respect were so great that it is a pity international congresses cannot meet oftener at Belgrade. Of course there were some congratulatory toasts at the end of the repast, but, being in the open air, it was not a convenient place for speaking, and we were given the hint to reserve our real speeches for the evening's indoor banquet. Towards four o'clock a number of peasants, in their picturesque dresses, had arrived, and the military band, which was ever in attendance upon us and had played throughout the repast, now performed country dance music, while the peasantry indulged in their native dances. Later the carriages took us back to town and then up the hill to the town park or promenade called the Kalemegdan.

The town of Belgrade stands on a promontory formed by the junction of the river Save and the Danube. The

junction of the two rivers is commanded by a limestone rock, on which is situated an old historical fortress, and round this fortress is the park in question. Immediately opposite, on the other side of both the Danube and the Save, are the Slav provinces of the kingdom of Hungary, and the Hungarian boundary town of Semlin can be easily seen from the heights of Belgrade. Looking at this picturesque scene as sanitarians, we were at once impressed with the sense of an unlimited, or rather an unimpeded, air-supply. Belgrade is remarkable for its trees and gardens. From a distance there seem to be as many clusters of trees as of houses. The houses with difficulty peer out from among the foliage, and such a thing as overcrowding through want of space between the houses is unknown. Then there is nothing around to check the free sweep of the wind. On the other hand, the broad, flat plain on the Hungarian side of the Save is constantly flooded by the overflow of the rivers and has a marshy, malarious look, which is not wholesome. After enjoying the view and visiting the fortress, where we were courteously received by the commander, Colonel Michel Sretchkowitch, a man of gigantic stature, and whose physique does great honour to the Slav race, we returned to our respective houses and hotels to put on evening dress. We were then taken to the theatre, where a gala performance had been organised. Acts of various Servian dramas and comedies were performed which best illustrated Servian customs, dresses, dances, and songs. The entertainment, though we did not understand the Servian language, proved very interesting. It lasted about an hour and a half, and then we were conducted to a large banqueting-hall close to the theatre. I could not help noticing the difference of our reception here to the disorderly scramble for food that had shocked so many of us at Budapest. No Servian, not even the ladies, took places at the tables without first seeing that all the guests were conveniently seated. The dinner was then served as is customary in civilised countries, and there was no snatching for morsels of food or running away with bottles of wine, such as we had witnessed at Budapest. Nor were speeches allowed till the close of the repast. The Servian Prime Minister then rose and in the name of the Servian Government delivered, unfortunately in Servian, a speech of welcome to the members of the Congress. This was greeted with loud cheers or cries of *Jivio*, and the Servians, holding their glasses towards their guests, shouted *Sdravo*—which being interpreted means, "Your health." Professor Chantemesse of the Pasteur Institute, delegate of the French Ministry of the Interior, responded in the name of the French Government and in a few appropriate words expressed his delight and surprise at the magnificent reception we had enjoyed. Mr. Adolphe Smith was appointed spokesman for the British delegation. Speaking in English and in French, he pointed out that if Servia was a small country it knew how to accomplish great things. As sanitary reformers we preached the doctrine of pure air, pure water, pure food. We sought, by protecting public health, to promote human intelligence; and the sympathies of England had always been with the Servians in their struggles for the freedom necessary to pursue the peaceful paths of science and civilisation. He drank to the Slav people, to their national aspirations, to their union in pursuit, under liberal and free institutions, of the happiness, the strength, and prosperity sanitary science would help to ensure. These remarks were received with the greatest enthusiasm by the Servians, and the British delegates and their spokesman were made the objects of continued and marked attention during the rest of the evening. Many other speeches were delivered, every nationality present deeming it its duty to say at least a few words. My guide and Mentor, M. Nicholas S. Iovanovitch, was specially deputed by the Servian reception committee to speak in English so as to thank the British delegation for the especially welcome observations that had been made in their behalf. He said the Servians present had rarely passed happier moments than when they had the honour of receiving in their humble home the apostles of English science.

When the banquet was over we were taken once more to the Kalemegdan Gardens, which, in our honour, were now for the first time illuminated by electricity. It was not far from one o'clock in the morning when we all returned to the railway station. Not only were we accompanied there, but several members of the reception committee insisted on entering the train and riding with us to the Bulgarian frontier. Thus, from seven in the morning till one o'clock at night we had been the subject of unceasing care and of continuous entertainments. At the hotels the members found that whatever expense they had incurred had been paid, and even gratuities were refused by the domestics. The hospitality was complete in every detail. The Servian Government and the municipality of Belgrade had both voted funds for this purpose. Nothing could have been more lavish, more carefully planned out, and better organised. Wearied, but highly gratified, the members of the Congress then sought sleep as best they could in the crowded carriages. The Servian members of the reception committee, who would insist in seeing us safely out of the country, had to camp in the dining-car, and it was not till the next morning that we reached the last station on the Servian line. Here we all descended to thank our hosts in the heartiest manner possible, and then started afresh on our long journey to Constantinople. We reached Nisch, the capital of Bulgaria, at 2 P.M., and as the train stopped there for two hours we were able to go into the town. Here the Turkish element is much stronger than at Belgrade. There was a very large mosque, and there were a good many Turks in the streets. The town bore the unmistakable impress of transformation and regeneration. Side by side with tumble-down little huts rose fine modern houses. Public buildings were in course of erection; in a word, a modern town is springing up on all sides. Nisch is situated on a plain with slight undulations, but there is a background of distant mountains that gives a picturesque aspect to the place. Evidently the future has much in store for the capital of this newly emancipated Danubian principality.

FOURTEENTH CONGRESS OF THE SANITARY INSTITUTE.

CONFERENCE OF MEDICAL OFFICERS OF HEALTH.

AN interesting discussion followed upon the papers by Dr. George Reid (Stafford) on Slop-closets, and Dr. Littlejohn (Sheffield) on Sewage Disposal, to which we made reference last week.

Sewage Disposal.

Dr. Alfred Hill (Birmingham) defended the "slop-closet" system. He said that when properly constructed and used they combined cheapness, simplicity, and sanitary qualities in a remarkable degree, especially when compared with the pail and the midden. Two great advantages of this system were that it was not affected by frost, and that it did not cause any addition to the existing volume of sewage, and therefore was not liable to give rise to embarrassment at the sewage farms.

Dr. Bostock Hill (Birmingham) referred to the various methods in use for the disposal of sewage—namely, (1) the method of discharging directly into the sea; (2) precipitation by various agents; (3) irrigation; (4) intermittent, downward filtration, with or without previous precipitation; (5) filtration through chemical media; (6) electric treatment; (7) Hermite treatment and other antiseptic treatment, amines, &c.; (8) the Massachussets filtration method, and others. He said that nearly all these methods gave bad results at times, and pointed to the common causes. In conclusion, he warned public authorities against expecting too much in the way of river purification in the neighbourhood of large towns.

Dr. Barwise (Derby County) considered it a hopeful sign that all were now agreed as to certain matters of principle respecting which many were at issue but a few years back. We all knew, for instance, that the processes designed to purify or sterilise sewage did no such thing. He referred to a system now in use in Derbyshire by which the sludge can be withdrawn from a sewage tank without emptying the latter, and gave a very favourable report of the working by this method.

Mr. Sydney R. Lowcock, M.Inst.C.E. (Birmingham), described his process of sewage precipitation and filtration, with separate treatment of sludge, alluded to by Dr. Barwise, and further explained the process of nitrification, for which time and air were principally essential. All antiseptic methods of treatment, he said, were radically wrong.

Dr. Boobbyer (Nottingham) drew attention to the fact that although the two papers on "Sewage Disposal" and "Slop-closets" had been taken together, it was not intended to confine the discussion to the first. He had hoped, he said, to hear an exhaustive discussion on the "Slop-closet"

question, but most of the speakers had avoided the topic. He said that he had recently issued a circular inquiry to most of the urban districts in England, Wales, and Scotland, embracing the whole question of sewage and refuse disposal but having particular reference to slop-closets. His own town, he said, had the largest number (41,000) of pail closets, Birmingham came next (33,000), and Oldham next (23,000). One town only advocated the extension of the pail system, sixteen recommended slop-closets of various designs, and ninety-four advised the adoption of water-closets—chiefly of the wash-down type. He had recently obtained very good results with some deep latrines and slop-closets (with small internal areas) that had been built for poor properties in Nottingham.

Two Important Resolutions.

At the conclusion of the Conference the following resolutions, of which notice had been given, were moved by Dr. Barwise and Mr. Hodson respectively and carried: 1. "That in the opinion of this Conference it is no longer expedient that appointments as medical officers of health and inspectors of nuisances should be made for limited periods of time." This resolution was carried unanimously. 2. "That this Conference of Medical Officers of Health adopts the resolution on the subject of the use of flesh from tuberculous animals as human food passed by the Society of Medical Officers of Health at their meeting on March 20th, 1893—viz.: 'That while awaiting the report of the Royal Commission on Tuberculosis, the presence of tubercle at any stage in more than one part or organ of a carcase, or the presence of tubercle in any other than the primary stage (crude tubercle) in any single part or organ of a carcase, is sufficient and proper ground for the condemnation of the carcase as unfit for food, and that all butchers' meat &c. of this kind should be condemned accordingly.'"

Medical News.

THE COUNTESS OF DUFFERIN'S FUND.—A report has been issued from Simla recording the progress of the National Association for supplying Female Medical Aid to the Women of India (colloquially known after its noble founder as "The Countess of Dufferin's Fund") during the five years from 1889 to 1893 inclusive. The numbers of the female students who have attended the schools of the fund during the time specified are respectively 192, 204, 224, 261, and 224, and the number of hospitals and dispensaries open has risen in somewhat the same proportion. The whole report shows that the work of medical tuition of women, of supplying trained midwives, and of establishing modern medical institutions has progressed in the most satisfactory manner, although, as cannot surprise any who know them, the high caste native ladies do not show any general disposition towards a medical career.

FOREIGN UNIVERSITY INTELLIGENCE.—*Bonn:* Dr. Pletzer has been recognised as *privat-docent* in Midwifery.—*Cracow:* Dr. K. von Kostanecki has been promoted to be Ordinary Professor of Anatomy in succession to Dr. Teichmann, who is retiring.—*Giessen:* Dr. H. Walther of Darmstadt has been recognised as *privat-docent* in Midwifery and Gynæcology.—*Gratz:* Dr. F. Kraus of Vienna has been appointed to the chair of Clinical Medicine in succession to Dr. Rembold, who is retiring.—*Halle:* Dr. C. Fränkel of Marburg has been appointed to the Chair of Hygiene.—*Lemberg:* Dr. H. Kadyl has been appointed to the chair of Anatomy.—*New York (College of Physicians and Surgeons):* Dr. V. P. Gibney has been appointed Professor of Clinical Surgery.—*(Policlinic):* Dr. F. M. Crandall has been appointed Assistant Professor of Children's Diseases.—*Rostock:* Dr. Garrè of Tubingen has been appointed to the chair of Clinical Surgery in succession to Dr. Madelung.—*Vienna:* Dr. Lott has been promoted to an Extraordinary Professorship of Midwifery and Gynæcology, and Drs. Finger and Mracek to Extraordinary Professorships of Syphilography and Dermatology.—Dr. Emil Redlich has been recognised as *privat-docent* in Neurology.—*Würzburg:* Dr. Heidenhain has been recognised as *privat-docent* in Anatomy, and Dr. O. von Franqué as *privat-docent* in Midwifery and Gynæcology.—*Zurich:* Dr. von Monakow has been promoted to an Extraordinary Professorship of Cerebral Anatomy and Physiology.

DEATHS OF FOREIGN MEDICAL MEN.—The deaths of the following members of the medical profession abroad are announced:—Dr. M Giuliani, Extraordinary Professor of Anatomy in the University of Rome; Dr. J. Maldonado, formerly Professor of Midwifery in the Medical School of Bogota.

THE *Newcastle Journal* understands that Lord Armstrong has agreed to provide a new hospital, both site and building, to be used as an out-patients' department in connexion with the Hospital for Sick Children, Morr Edge. The gift will be especially associated with the name of the late Lady Armstrong.

HORNBOOKS.—Before closing his work on the old "A.B.C. Hornbook," which is to contain something like 200 illustrations, Mr. Andrew Tuer of the Leadenhall Press, E.C., asks to be favoured with notes from those members of the medical profession who may remember the hornbook in use, or who may have in their possession examples which he has not yet seen. Information about spurious hornbooks is also sought.

THE ROYAL ORTHOPÆDIC HOSPITAL.—The half-yearly meeting of governors of this hospital was held on Thursday, Sept. 27th, when the Chairman, Mr. F. J. Pilkington, stated that the number of in- and out-patients admitted during the half-year was 516, being an increase of 31 compared with the number similarly received during the preceding half-year. The report, which was in other respects satisfactory, was adopted.

THE CHELSEA HOSPITAL FOR WOMEN.—The Home Secretary communicated with the Chelsea Vestry respecting the charges against the management of the hospital, saying that after the impartial and judicious report made by the Committee of Inquiry appointed by the governors of the charity, he does not think that further investigation would serve any useful object. Also, he does not consider that he has any power to order such official investigation.

THE NATIONAL ORTHOPÆDIC HOSPITAL.—The report of the National Orthopædic Hospital for 1893 shows that 1583 persons have been treated as in-patients and 6469 as out-patients during the past ten years. By a munificent bequest from the late Mr. Samuel Fielden of £2000, and by the reception of other generous assistance, the committee of the hospital has been enabled to increase the number of beds from thirty-five to sixty-one, and also to extend greater accommodation to the out-patients. The balance-sheet, however, shows a considerable debt.

LORD DUCIE AND THE DEATH DUTIES.—Lord Ducie has forwarded a cheque for £500 to the Gloucestershire Infirmary and Eye Institution, but stipulates that the capital shall be kept intact until his demise. The Chairman of the Institution, in announcing the donation, said that Lord Ducie's will contained a bequest of that amount, but as that sum would be diminished by charges made by the State he considered it better to make over the money during his life. It may be remembered that on the appearance of the Budget we expressed a similar opinion.

THE GRESHAM LECTURES.—These lectures will be delivered in Gresham College, on Oct. 9th, 10th, 11th, and 12th, 1894, at six o'clock, by Dr. E. Symes Thompson, Gresham Professor of Medicine. The subject chosen for his lectures is "Life Assurance in its Medical Aspects." Lecture I. will deal with the general principles of assurance; Lecture II. with life assurance in its relation to public health; Lecture III. with life assurance in its relation to the medical profession; and Lecture IV. with gout, consumption, and heredity, and their bearings on life assurance.

FOOTBALL CASUALTIES.—On the 22nd ult., in a match at Watford between the West Herts and Royal Engineers teams, a player (a forward) fractured his knee, and another player (a centre forward) also sustained injury to his knee. On Saturday last, during a match on the Recreation Ground, Driffield, between the Driffield and Selby Mispah teams, the Driffield full-back fractured his leg. On the same day, in a match at Kinver between the Kinver and Kingswinford Clubs, a player received injuries from which he died on Monday last. While playing a match on Wednesday last at Burnham, between the Reading and Burnham Clubs, a player fractured his right leg.

We have received through Messrs. Burroughs, Wellcome, and Co. a copy of the Souvenir of Budapest, which was distributed to the members of the Congress of Hygiene and Demography, recently held in the Hungarian capital. The literary matter consists chiefly of testimonials to, and cases proving the efficacy of, the Francis Joseph Bitter-water, the proprietor of which aperient spring has been at the cost of issuing the souvenir; but the numerous illustrations afford a very true pictorial representation of Budapest.

PLYMOUTH MEDICAL SOCIETY.—The office-bearers of this Society for 1893-94 are as follows:—President, Mr. Connell Whipple; Vice-Presidents, Messrs. E. M. Russel-Rendle (Plymouth), T. Leah (Stonehouse), and G. Thom (Devonport); Hon. Treasurer, Mr. J. Elliot Square; Hon. Librarian, Mr. C. E. Russel-Rendle; and Hon. Secretary, Mr. Reginald H. Lucy, 9, Princess-square, Plymouth. Among the papers announced are one upon Angular Spinal Curvature on Saturday, Oct. 21st, by Mr. W. Square, and one upon Glaucoma on Saturday, Dec. 27th, by Mr. J. Elliot Square.

MIDWIVES' QUALIFICATION AND REGISTRATION BILL.—A meeting of medical men of Chester and the neighbourhood was held at the Queen's Hotel on Friday, the 28th ult., when seventeen gentlemen attended. Mr. J. E. Moreton, F.R.C.S., was voted to the chair, and resolutions carried with only one dissentient against the proposed attempt to legalise the irregular practice of midwifery, and calling upon the General Medical Council to declare "infamous in a professional respect" the conduct of all practitioners who continue to issue documents purporting to be diplomas.

LONDON POST-GRADUATE COURSE.—The vacation courses in bacteriology and pathology have been well attended, and we learn that the winter term will commence on Monday, the 8th inst., and practical demonstrations and lectures will be given on diseases of the chest, of children, of the nervous system, of the eye, of the mind, and of the throat, nose, and ear, and on bacteriology and general medicine and surgery. Practitioners can attend all the courses, as the time-table is arranged with that object, or they can take out any portion of them. All particulars with regard to fees can be obtained from the Secretary, Dr. Fletcher Little, 32, Harley-street, Cavendish-square, W.

PRESENTATIONS TO MEDICAL MEN.—Mr. Frederic Henry Ward was presented with a handsome silver tea-service by the officers and servants of the Middlesex County Asylum, Wandsworth, on his retirement from the office of assistant medical officer, which he had held for over twenty-six years.—On the evening of Sept. 28th, at a public meeting held at Stillington, the successful pupils of the ambulance classes held under the auspices of the St. John Ambulance Association presented their surgeon-instructor, Dr. F. Sidney Gramshaw, with a handsome silver-mounted and inscribed hunting-crop as a mark of their good-feeling and appreciation of his services. The Rev. W. H. Jemison, LL.B., made the presentation. Dr. Gramshaw instructed four ambulance classes during last winter.—Dr. M. Coughtrey, of Dunedin, N.Z., has been presented by the office-bearers of Knox Church with an address, accompanied by a silver tea and coffee service and salver, in recognition of his professional services to the late Dr. Stuart during a prolonged illness.

BRADFORD MEDICO-CHIRURGICAL SOCIETY.—At a meeting held on Oct. 2nd, 1894, Dr. Samuel Johnston, the new president of the society, who was in the chair, delivered an address on Medical and Surgical Progress. The germ theory of disease and Sir Joseph Lister's antiseptic method of treating wounds were briefly alluded to, and advances in the surgical treatment of cerebral, thoracic, and abdominal diseases were noted. With regard to medicine such progress, he said, could not be recorded. The tendency of the age was to ascribe all ailments to bacilli, but yet no remedies had been found for cancer or for tubercle. The fondness of the public for drugs was dwelt upon, the expectant method of treatment finding little favour in popular estimation. In conclusion, the president compared preventative with curative medicine and alluded to the possibility of the medical men of the future being State-paid officials.

CHARING-CROSS HOSPITAL MEDICAL SCHOOL.—The Scholarship of 60 guineas open to students of the Universities of Oxford and Cambridge has been awarded to Mr. William Cecil Bosanquet of New College, Oxford. The Entrance Scholarship of 120 guineas has been awarded to Mr. A. K. Taylor, and that of 60 guineas to Mr. Ernest Lewis Lilley.

BOOKS ETC. RECEIVED.

BAILLIÈRE, TINDALL, & COX, King William-street, London, W.C.

Illustrations of Pathological Anatomy: being a Series of Chromographed Plates painted from Nature immediately after Death. English Edition by M. Armand Ruffer, M.D. Oxon. Parts VII. and VIII.

Practical Manual of Diseases of Women and Uterine Therapeutics. By H. Macnaughton-Jones, M.D. Sixth Edition. 1894. pp. 766.

BLACK, ADAM & CHARLES, London.

The Senile Heart: its Symptoms, Sequelæ, and Treatment. By G. W. Balfour, M.D. St. And. 1894. pp. 300. Price 5s.

BICKER & SON, Leicester-square, London, W.C.

The Complete Poetical Works of Constance Naden. By R. Lewins, M.D. 1894. pp. 361.

CHURCHILL, J. & A., New Burlington-street, London.

Alpine Climates for Consumption. By H. J. Hardwicke, M.D., F.R.C.S., M.R.C.P. 1894. pp. 65. Price 2s. 6d.

FISCHER, GUSTAV, Jena.

Die Lehren von den Funktionen der einzelnen Theile des Ohrlabyrinths. Von Dr. Stanislaus von Stein; übersetzt und bearbeitet von Dr. C. von Krzywicki. 1894. pp. 697.

Chirurgische Operationslehre. Von Dr. Th. Kocher. Zweite Auflage. 1894. pp. 323.

LONGMANS, GREEN, & CO., Paternoster-row, London.

A Text-book of Inorganic Chemistry. By G. S. Newth, F.I.C., F.C.S. 1894. pp. 667. Price 6s. 6d.

Watts' Dictionary of Chemistry. By M. M. P. Muir, M.A., and H. F. Morley, M.A., D.Sc. Vol. IV., with Addenda. Ph—Z. 1894. pp. 922. Price 63s.

MACMILLAN & CO., London.

A Text-book of Pathology, Systematic and Practical. By D. J. Hamilton, M.B., F.R.C.S. Edin. Illustrated. Vol. II., Part 1, and Vol. II., Part 2, pp. 515 to end. 1894. Cash price 15s. each.

PENTLAND, YOUNG J., Edinburgh and London.

Atlas of the Diseases of the Skin. By H. Radcliffe Crocker, M.D., F.R.C.P. Fasciculus VI. Price 21s. net.

Diseases of the Skin. By W. A. Jamieson, M.D., F.R.C.P. Edin. Fourth Edition. Illustrated. 1894. pp. 660.

SAMPSON LOW, MARSTON, & CO., Fetter-lane, London, E.C.

Orient Line Guide. Edited for the Managers of the Line by W. J. Loftie, B.A., F.S.A. Fifth Edition. Illustrated. 1894. pp. 431. Price 3s. 6d.

SMITH, ELDER, & CO., Waterloo-place, London.

Dictionary of National Biography. By Sidney Lee. Vol. XL., Myllar—Nicholls. 1894.

Index of Medicine: a Manual for the use of Senior Students and Others. By Seymour Taylor, M.D. 1894. pp. 794. Price 12s. 6d.

SWAN SONNENSCHEIN & CO., Paternoster-square, London.

Rainmaking and Sunshine. By John Collinson. 1894. pp. 280. Price 3s. 6d.

THE OFFICE OF GOVERNMENT PRINTING, Calcutta, India.

Archæological Survey of India. The Bower Manuscript, edited by A. F. Rudolf Hoernle, Ph.D. 1893. Also Part 2, Fasciculus I. 1894.

VOGEL, F. C. W., Leipzig.

Diagnostik der inneren Krankheiten. Von Dr. Oswald Vierordt. 4. Auflage. 1894. pp. 618.

The Treatment of Delirium Tremens during an Alcoholic Service in Bellevue Hospital; by R. Bellamy, M.D.; reprint from New York Medical Journal, July, 1894.—Sonderabdruck aus der Allgemeinen Medicinischen Central-Zeitung (O. Coblentz, Berlin).—Columbia College in the City of New York: course in the College of Physicians and Surgeons; announcement for 1894-95.—Climatic Therapeutics in the Treatment of Pulmonary Tuberculosis; by E. O. Otis, M.D.; reprint (Damrell & Upham, Boston, U.S.A., 1894).—Thesis for the Degree of Doctor of Science of Edinburgh University; by Surgeon-Major H. H. Johnston, Aug. 1st, 1894 (Banks & Co., Edinburgh).—Annales de la Policlinique de Bordeaux, Septembre, 1894 (Feret & Fils, Bordeaux).—Report on the Relation between Malarial Fever among Her Majesty's White Troops at Port Louis, Mauritius, and the Meteorological Elements of Temperature, Rainfall, and Relative Humidity for the Year 1889; with a preliminary Sketch of the Medical Topography of the Island and the Epidemic of Malarial Fever in 1866-67; by Surgeon-Major H. H. Johnston, Edinburgh, Aug. 1st, 1894 (The Darien Press, Edinburgh).—Ueber die vordere Tenotomie, Mobilisirung, und Extraction des Steigbügels; von Professor Kessel in Jena (Gustav Fischer, Jena, 1894).—La Syringomyélie, Maladie Familiale; par Drs. Verhoogen et Paul Vanderveldo

(H. Lamertin, Bruxelles, 1894).—Directions for Laboratory Work in Bacteriology, for the Use of the Medical Classes in the University of Michigan; by Fred. G. Novy, Sc.D., M.D. (Geo. Wahr, Ann Arbor, Mich.).—The Natural History of Plants, Part VI. (Blackie & Son, Old Bailey, London); price 2s. 6d.—Geschichte des Statistischen Bureaus der Haupt- und Residenzstadt Budapest, 1869–1894; von Dr. Gustav Thirring (Puttkammer und Mühlbrecht, Berlin, 1894).—Opera Pia de Ferrari Brignole Sale in Genova; Resoconto Clinico-Statistico dell' Ospedale S. Andrea Apostolo nell' anno 1893 (B. Carlini, Genova, 1894).—Handbuch der Speciellen Therapie innerer Krankheiten; neunte und zehnte Lieferung (Gustav Fischer, Jena, 1894).—Journal of the Scottish Meteorological Society; with Tables for the Year 1892; Third Series, No. 10 (Wm. Blackwood & Sons, Edinburgh and London); price 12s. 6d.—XIX. Statistik der Infectiösen Erkrankungen in den Jahren 1881–1891, und Untersuchung des Einflusses der Witterung; von Josef Körösi (Puttkammer & Mühlbrecht, Berlin, 1894).—Magazines for October: The English Illustrated Magazine, Sunday at Home, Leisure Hour, Boy's Own Paper, Boy's Out-door Games and Recreations, Girl's Own Paper, Girl's Own Out-door Book (Religious Tract Society), Leeds Hospital Magazine, the Phrenological.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.*

CRAWFORD, CYRIL R., M.R.C.S., L.R.C.P., has been appointed House Physician to the Sussex County Hospital, Brighton, vice W. A. Hallam, resigned.

FULLERTON, F. W., M.B., B.S., M.R.C.S., L.R.C.P., has been appointed Medical Officer to the district of West Sculcoates, Hull.

HOBART, N. H., M.B., B.C. Camb., L.R.C.P. Lond., M.R.C.S., has been appointed Junior Assistant Surgeon to the North Infirmary, Cork.

HOWIE, J. L., M.B., C.M. Glasg., has been appointed Tent Surgeon to the "Edward Irving Tent" of Rechabites, vice Black, resigned.

JESSOP, W. H. H., M.B., F.R.C.S., has been appointed Ophthalmic Surgeon to St. Bartholomew's Hospital.

LONG, F. T., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer and Public Vaccinator for the Colton Sanitary District of the Ulverston Union.

MACDONALD, A., M.D. Penn., U.S.A., has been appointed Public Vaccinator for Sale, Victoria, Australia, vice Reid, resigned.

MOIR, J. MUNRO, has been appointed Honorary Physician to the Northern Counties Institute for the Blind, Inverness, vice F. M. Mackenzie, resigned.

O'MAHONY, D. J., M.D. Irel., M.Ch., L.R.C.P., L.A.H. Dublin., has been appointed Senior Assistant Surgeon to the North Infirmary, Cork.

RYAN, DAVID J., M.B., B.Ch., B.A.O. Irel., has been appointed Medical Officer to the Phillipstown Dispensary.

SMYTH, ERNEST J., M.B., B.S. Lond., has been appointed Resident Clinical Assistant at the St. Marylebone Infirmary, vice L. Bathurst, resigned.

VINCENT, HENRY BIRD, M.R.C.S., has been appointed Medical Officer of Health to the Erpingham Rural Sanitary Authority, vice C. T. Taylor, resigned.

WATT, NEISH PARK, M.A., M.B. Edin., has been appointed Assistant Resident Medical Officer to the Royal Lunatic Asylum, Dundee.

WHITE, J. W., L.R.C.P., L.M. Irel., L.F.P.S. Glasg., M.R.C.S., has been appointed Medical Officer for the No. 2 Sanitary District of the Bedminster Union.

WILSON, CHARLES, M.B., C.M. Glasg., has been appointed Resident Medical Officer to the Victoria Hospital, Burnley, vice Francis J. H. Coutts, resigned.

YOUNG, C. A., L.R.C.P. Lond., M.R.C.S., has been appointed House Surgeon to the Hertford Infirmary.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

ANCOATS HOSPITAL, Manchester.—Resident Junior House Surgeon. Salary £60, with board and washing.

ANCOATS HOSPITAL, Manchester.—Resident Senior Surgeon. Salary £80, with board and washing.

CHILDREN'S HOSPITAL AND DISPENSARY, Manchester.—Medical Officer. Salary £180 per annum.

CROYDON UNION.—Assistant Medical Superintendent and Dispenser at the Infirmary, May Day-road, Croydon, unmarried. Salary £125, increasing £5 per annum up to £150, with furnished apartments, rations, and washing, and an allowance of £3 10s. per annum in lieu of beer. Applications to the Clerk to the Guardians, Union Offices, May Day-road, Thornton Heath.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—House Physicians.

HOSPITAL FOR WOMEN (THE LONDON SCHOOL OF GYNÆCOLOGY), Soho-square, W.—Clinical Assistants.

HUDDERSFIELD INFIRMARY.—Junior House Surgeon. Salary £40 per annum, with board, lodging, and washing.

KILBURN, MAIDA-VALE, AND ST. JOHN'S WOOD GENERAL DISPENSARY.—Honorary Medical Officer. Applications to the Secretary, 13, Kilburn-park-road, W.

ROTHERHAM HOSPITAL DISPENSARY.—Assistant House Surgeon for six months. Rooms, commons, and washing provided in the hospital.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, Plymouth.—Assistant House Surgeon. Board and residence provided in the hospital.

STAFFORDSHIRE GENERAL INFIRMARY, Stafford.—Assistant House Surgeon. Board, lodging, washing, &c., provided.

STIRLING DISTRICT ASYLUM, Larbert.—Second Medical Officer. Salary £80, with board and lodging.

STOCKPORT INFIRMARY.—Junior Assistant House Surgeon for six months. Board and residence provided, and an honorarium of £10 will be given after six months' satisfactory service.

ST. PANCRAS AND NORTHERN DISPENSARY, 126, Euston-road.—Physician Accoucheur. Applications to the Hon. Sec., 23, Gordon-street, Gordon-square, W.C.

ST. PANCRAS AND NORTHERN DISPENSARY, 126, Euston-road.—Resident Medical Officer. Salary £105, with residence and attendance. Applications to the Hon. Sec., 23, Gordon-street, Gordon-square, W.C.

WEST RIDING ASYLUM, Wakefield.—Two Resident Clinical Assistants for six months. Board and furnished apartments provided.

Births, Marriages, and Deaths.

BIRTHS.

ADAMSON.—On Sept. 23th, at Woodville-road, Ealing, W., the wife of Surgeon-Captain H. McK. Adamson, A.M.S., of a daughter.

BIRD.—On Sept. 27th, at Trafalgar-square, Fulham-road, Chelsea, the wife of Arthur Hinckes Bird, L.S.A., of a son.

FRAZER.—On Sept. 26th, at Heath-terrace, Leamington Spa, the wife of Surgeon-Lieutenant-Colonel P. T. Frazer of a son.

SMALLPIECE.—On Oct. 1st, at Queen Anne's-gate, the wife of William Donald Smallpiece, L.R.C.P. Lond., of a son.

MARRIAGES.

ANDREWS—FERRAR.—On Sept. 26th, at St. Thomas's Church, Belfast, Surgeon O. W. Andrews, R.N., of St. Briavels, Gloucestershire, to Florence Augusta Howard, younger daughter of Augustus Minchin Ferrar, Torwood, Belfast.

BLANDFORD—HAVERSON.—On Aug. 20th, at All Souls, Langham-place, London, W., Henry Edmund Blandford, M.A., M.D., of Bedford-park, Croydon, to Laura Louise, youngest daughter of the late John T. Haverson, Anerley-park, Surrey.

CROSS—JOHNSON.—On Sept. 27th, at St. Mary's, Hornsey-rise, Edward John Cross, D.P.H. Cantab., M.R.C.S. Eng., L.R.C.P. Lond., of St. Neots, Hunts, to Beatrice Emily, eldest daughter of H. W. Johnson, of Hornsey-lane, London, N.

GIBSON—COLLINS.—On Sept. 27th, at St. Mark's, Hamilton-terrace, James Hill Gibson, M.D., Maida-vale, W., to Alice, elder daughter of John Collins, of Maida-vale, W.

LEWIS—KEMPTHORNE.—On Sept. 18th, at the Parish Church of Cadoxton, Neath, Llewelyn Lewis, M.R.C.S., L.R.C.P., to Lucy Maude Kempthorne, youngest daughter of James Kempthorne, Esq., Waunceirch, Neath.

MACGREGOR—DOVASTON.—On Sept. 27th, at Westfelton Church, John Ferguson Macgregor, M.B., of Lochaline, Oban, to Ada, second daughter of John Dovaston, J.P., of Westfelton, Shropshire.

NEWTON—JACK.—On Sept. 26th, at St. Mary's, South Kensington, Isaac Newton, L.R.C.P. Lond., M.R.C.S. Eng., of Tonbridge, to Kathleen Mabel, second daughter of Dr. R. Jack, of Cathcart-road, South Kensington.

SQUIRE—GIRLING.—On Sept. 28th, at Thorington Church, by the Rev. Canon Mayor, assisted by the Rev. J. H. Poole, M.A., F. H. Squire, M.R.C.S., L.R.C.P., L.S.A., of Pudsey, Yorks, son of Dr. S. Squire, of Wyvenhoe, to Jessie, second daughter of Mr. John Girling, of Thorington Hall, Essex

DEATHS.

BLENKINS.—On Sept. 26th, at Heene-terrace, Worthing, G. E. Blenkins, Deputy-Inspector-General of Hospitals, late Grenadier Guards.

JEFFRIES.—On Sept. 30th, at Montpelier-terrace, Brighton, William Carey Jeffries, L.R.C.P., L.R.C.S. Edin.

MADGE.—On Oct. 3rd, at Ivy House, St. Albans, Herts, Henry M. Madge, M.D., formerly of 4, Upper Wimpole-street, W., aged 70.

MORRIS.—On Sept. 23rd, at Camden-road, Dr. Henry Sutherland Morris, in the 94th year of his age.

WITHAM.—On Sept. 30th, James Witham, M.D., of Littlehampton, Sussex, in his 74th year.

YEATES.—On Sept. 17th, Surgeon-Lieutenant R. A. Yeates, Indian Medical Service, son of the Rev. G. Yeates, Rector of Lissan, Moneymore, county Derry, Ireland.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Oct. 4th, 1894.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp.	Rainfall.	Remarks at 8.30 A.M.
Sept. 28	30·30	S.E.	45	44	98	59	43	...	Foggy
,, 29	30·30	N.E.	49	45	96	60	43	...	Fine
,, 30	30·50	N.E.	53	50	102	61	48	...	Fine
Oct. 1	30·49	N.E.	52	50	92	60	48	...	Overcast
,, 2	30·46	E.	54	50	94	61	48	...	Dull
,, 3	30·25	E.	54	50	85	60	52	...	Dull
,, 4	30·13	N.E.	53	50	81	56	52	...	Dull

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (1 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynecological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.).

TUESDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1.30 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.).

WEDNESDAY.—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), Gt. Northern Central (2.30 P.M.), King's College (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.).

THURSDAY.—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (2 P.M.), Chelsea (2 P.M.), Soho-square (2 P.M.), North West London (2 P.M.).

FRIDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), Cancer (2 P.M.).

SATURDAY.—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

MONDAY.—MEDICAL SOCIETY OF LONDON.—8.30 P.M. Address by the President (Sir William B. Dalby) on "The Pleasures of Medicine and Surgery."—Dr. J. Althaus: Nosophobia and Hypochondriasis.

WEDNESDAY.—LARYNGOLOGICAL SOCIETY OF LONDON (20, Hanover-square, W.).—5 P.M. Cases will be shown by Messrs. Cresswell Baber and R. Lake, and Drs. Bennett, Bond, Bronner, De Havilland Hall, and Scanes Spicer.

HUNTERIAN SOCIETY.—8.30 P.M. Mr. Thomas Bryant: Some Subjects of Public and Professional Interest.

THURSDAY.—BRITISH GYNÆCOLOGICAL SOCIETY.—Specimens will be exhibited. Mr. Bowreman Jessett: Myoma of the Uterus complicating Pregnancy, illustrated by a case successfully operated on.

DERMATOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND.—5 P.M. Dr. G. G. Stopford Taylor (Liverpool): A Comparison of the Various Methods of Treating Lupus Vulgaris adopted by the Author during the past Twenty Years. Cases of interest on exhibition from 4.30 P.M.

FRIDAY.—BRITISH LARYNGOLOGICAL AND RHINOLOGICAL ASSOCIATION (11, Chandos-street).—8 P.M. Election of Officers. Cases will be presented by Dr. Milligan, Dr. Dundas Grant, Mr. Lennox Browne, Mr. John Bark, Mr. Wyatt Wingrave, and others.

CLINICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Rose Bradford: A case of Intracranial Aneurysm.—Dr. Hale White: Two cases of Intracranial Aneurysm.—Dr. J. E. Paul: A case of Acute Pancreatitis.—Dr. Soltau Fenwick: A Fatal Form of Tetany associated with Chronic Dilatation of the Stomach.—Mr. Eve: A case of Tuberculous Lymphangitis following Inoculation of Finger.

LECTURES AND ADDRESSES.

WEDNESDAY.—ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-sq., W.C.).—Dr. Morgan Dockrell: Initial Lesions.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.—3 P.M. Lecture by Dr. Gowers.

WEST LONDON HOSPITAL (Hammersmith-road, W.).—5 P.M. Dr. Hood: Dyspepsia. (Post-graduate Course.)

THURSDAY.—CHARING-CROSS HOSPITAL.—4 P.M. Dr. Green: Cases in the Wards. (Post-graduate Course.)

FRIDAY.—LONDON SKIN HOSPITAL.—8 P.M. Dr. Barry: Psoriasis.

Notes, Short Comments & Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale and advertising departments of THE LANCET should be addressed "To the Manager."

We cannot undertake to return MSS. not used.

MANAGER'S NOTICE.

UNDER no circumstances do the Proprietors authorise the insertion of loose advertisement circulars and handbills in THE LANCET. Any such announcements are inserted by the newsagents, whom the Proprietors cannot control. At the same time, the Manager will be glad if readers will send him copies of any circulars, with the name and address of the agent through whom they obtain THE LANCET, and the Manager will then endeavour to mitigate the nuisance.

CANCER AND UNQUALIFIED PRACTITIONERS.

AT Macclesfield Town-hall last week the Coroner investigated a case of cancer attended by a person known as "the Reddish doctor," but about whose qualification the Coroner did not seem to be satisfied. Detective Dale had been written to by this person describing his qualifications, but the officer was away. The Coroner promised that if he found the person in question to be representing himself as a qualified medical practitioner he would report him "to the Medical Society." We presume the coroner means the Medical Defence Union. It is lamentable that there is no legally appointed person to take action in such cases.

Small Chemist.—We are happy to be able to answer our correspondent's query. The best advice that can be given for his client is that he should consult a medical man. We do not see that "Small Chemist" need be ashamed of his ignorance of the pure physician's work; but it is not so clear that he ought not to be ashamed of pretending to practise the part of the physician to the possible detriment of a fellow-being.

STOP THIEF!

To the Editors of THE LANCET.

SIRS,—Yesterday evening, as I was dressing for dinner, my servant came up saying that a gentleman in the hall wanted to know at what hour to-day I could see a lady in Upper Gloucester-place; but before the servant had got down with the message the "gentleman" had disappeared, as had also a travelling bag with its contents, amongst which was, unfortunately, my bunch of keys. He is described as being about twenty-eight years of age, with a dark moustache. In connexion with this brief record there are, I regret to say, several important omissions. I wish that I could give a fuller "personal history" of the individual, and knew more of his "previous history." His "present condition" (as my clinical clerks would write) is, I should say, unsatisfactory; but the prognosis should be "good" if my professional brothers would put their servants on the look-out and would themselves be ready to act on the line of Mr. Arthur Farr of Kennington-road.

I am, Sirs, yours truly,

Sept. 28th, 1894. EON.

CONSULTATIONS WITH HOMŒOPATHS.

An Old Subscriber is puzzled as to his duty when asked to meet a homœopath who is always most agreeable to place the treatment unreservedly in his hands on strictly allopathic lines and to be guided entirely by his advice and directions, which he has always found to be honestly carried out. He asks first what is his plain duty—to go or not to go? Secondly, does he by going incur the displeasure of the General Medical Council? Our general answer would be that in their very nature, as between those who do not agree, such consultations are to be avoided. More particularly in regard to a specific case, when the homœopath abandons all his principles and becomes for the time being an ordinary medical practitioner, it does not seem that our correspondent's honour is necessarily involved, however the homœopath's may be. The General Medical Council, we may say in reply to our correspondent's second question, does not interfere in such cases. We must not venture here to moralise on the ethics of homœopathy as illustrated in this case; but it is obvious that consultation with practitioners who can entirely subordinate their principles when occasion requires is unsatisfactory. The honest course for such a homœopath would be to admit that his system had failed, and to give up the case to those who have larger views of medical doctrine and duty.

Pax does not say whether the authorities of the Lodge consented to the arrangement by which an unqualified man did the work. The questions are legal rather than medical, but we should consider that the arrangement was illegal and the certificates invalid, and that members would have a right to call in another medical man whose certificates would be binding. If the authorities of the Lodge were parties to the arrangement we think that a member calling in another medical man would have a claim for expenses.

Mr. John Bowes.—We think the appointment clearly renders the holder ineligible for a District Councillor.

M.R.C.S., L.R.C.P.—Our correspondent's letter shall receive attention.

UNWASHED HANDS.

To the Editors of THE LANCET.

SIRS,—The family physician of to-day keeps a watchful guard over the physical environment of his patients and is thankful to THE LANCET as week by week the practical benefits of obeying the laws of personal hygiene are transcribed from its pages to the columns of our weekly papers. The latter give a column this week to the subject—"Is hand-shaking a dangerous practice?" which induces me to beg you to draw attention to a more practical and common-sense view of the dangers of unclean hands. I allude to such servants of the public as railway-ticket collectors, the guards on trams and 'buses, telegraph messengers, and postmen. Do the medical officers of health inspect the lavatory accommodation provided by the employers for these hard-working officials? The condition of personal cleanliness of soldiers—the hands, hair, dress &c.—is daily inspected before mounting guard. Are our civilian *employés* inspected? For insobriety or sickness also should be detected early. How can they have clean hands with unclean heads? Have they orders to wash the silver and copper coin at the termination of every journey? A 'bus horse falls down; how often does the guard think of washing his hands after pulling the beast about? Postmen hand us our letters at the hall-door with the perspiring fingers of bodies occasionally infected with blood diseases. Would it not be a wise hygienic precaution in every household to dip the letters on arrival in a basin containing some disinfectant? Once more: might not risk of infection to the travelling public be further curtailed by discarding our dusty absorbent cushions for the American plan of polished wood or cane seats in our tramcars? Omnibuses, owing to their unfortunate construction, require cushions to counteract the jolting.

I am, Sirs, yours faithfully,

Seaforth, Sept. 22nd, 1894. F.R.C.S.

"FAMOUS FEMALE MIXTURE."

THOUGH the proprietress of this mixture, described as "the most effective on earth" and "for most obstinate cases"—words suggestive!—is described as "Madam Frain (M.B.)," the lady does not seem to be in the Medical Register. The address—"Herbal Institute, 1A, Hackney-road"—has another signification.

IN reference to our report upon "toe-post" shoes (THE LANCET, Sept. 22nd, 1894, p. 723), the proprietors of the invention have signified to us their willingness to work under surgical instructions.

KING'S COLLEGE HOSPITAL.

To the Editors of THE LANCET.

SIRS,—Will you permit me through THE LANCET to ask all old King's College men holding commissions in the Volunteers to kindly send their names, rank &c. to me at the address below?

I am, Sirs, yours obediently,

VALENTINE MATTHEWS, Surg.-Capt. V.M.S.C.

22, Suffolk-street, Pall Mall, S.W., Oct. 1st, 1894.

THE PERILS OF FOOTBALL.

WE have received from a correspondent, in reference to the fact that many serious accidents, and more than one death, have already, and thus early in the season, been reported from the football field, the following letter:—

> "All lovers of football, both players and spectators, would rejoice if accidents due to football were of less frequent occurrence; and I feel sure that such would be the case if these suggestions were carried out: 1. Give the linesmen, as well as the referee, power to stop the play for a foul charge or hack. 2. Let the spectators desist from such cries as "pay him out," &c. 3. Let the players wear tennis shoes, and not boots with steel plates inside the toes, as I know the modern boots are now made."

We agree with our correspondent's first two suggestions, and go further. It has always been our cry—and we have been pleased to see it taken up and echoed approvingly by our contemporaries, medical and lay—that the strengthening of the authority of the referee, coupled with more drastic penalties for the wrongdoer, must be the most practical method of preventing accidents that arise not so much from the essential laws of the game as from "bad blood." And certainly such cries as "pay him out" are the very things to rouse the evil spirit. Our correspondent's third suggestion is not so sensible. Firstly, nailed and steel-shod footgear is not permissible by the laws of the game; and, secondly, indiarubber soles would practically alter the game.

Ismael, R. N., J. I., and others.—We are not aware that there is any demand for medical assistants by either the Chinese or Japanese Governments.

Dives.—The facilities our correspondent desires are rather those offered by benefit clubs than by the well-known insurance companies.

Mr. H. Thomas.—We do not give medical advice.

"AN INQUIRY."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Sept. 29th, page 773, "Country Doctor" traverses my statement that 2*s.* or 2*s.* 6*d.* is the usual charge for visit and medicine to agricultural labourers and small farmers, whose pecuniary position may be considered to be about the same. I do not care at all to go into the calculation as to the value of time expended, professional services, horse-flesh &c. as suggested. I simply ask what is it reasonable to expect a man earning from 12*s.* to 14*s.* a week, and generally supporting a family on that, to be able to pay? I have patients of the classes mentioned living from four to five miles from my house, and surely it would be absurd to expect them to pay 7*s.* 6*d.* for visit and medicine. The usual way is not to make more special journeys—for which something extra can be charged—than is essential, and to see such patients on the round. Is not this rate of payment better than club work at 5*s.* per head per annum, which most country practitioners have a certain amount of?

I am, Sirs, yours faithfully,

Oct. 1st, 1894. NECESSITAS.

WANTED, A PROGNOSIS.

To the Editors of THE LANCET.

SIRS,—Can any of the readers of THE LANCET give me any facts concerning the prognosis in cases of deafness resulting from fracture of the base of the skull? I am, Sirs, yours faithfully,

Manchester, Sept. 26th, 1894. G. A. WRIGHT.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

During the week marked copies of the following newspapers have been received:—*Newcastle Chronicle, Sheffield Independent, Bradford Daily Argus, Norwood News, South Wales Daily News, Truth, Huddersfield Examiner, East Anglian Daily Times, Ilkeston Advertiser, Rhyl Journal, Bridgwater Independent, Gravesend Standard, Guardian, Western Morning News, North Berwick Advertiser, Grimsby Weekly Express, The Wings, Sanitary Record, City Press, Weekly Free Press and Aberdeen Herald, Local Government Chronicle, West Middlesex Standard, Hertfordshire Mercury, Liverpool Daily Post, Bristol Mercury, Yorkshire Post, Leeds Mercury, The Star, Johannesburg, Reading Mercury, Hastings and St. Leonards Observer, Hastings and St. Leonards News, Morning Leader, Surrey Advertiser, Local Government Journal, West Middlesex Advertiser, Pool Herald, Llangollen Advertiser, Dublin Figaro, Cork Western News, The Academy, Colonies and India, South Africa, The Times, Railway Times, Perthshire Constitution, Levant Herald, Carlisle Patriot, The Hotel, Driffield Observer, Liverpool Courier, World, Salisbury Journal, Hereford Times, Kentish Express, Leek Times, Scotsman, Cape Times, Pocklington News, Crieff Journal, Midhurst Times, Swansea Herald, Leicester Daily Post, Staffordshire Sentinel, Evening Telegraph (Dundee), Glasgow Evening News, &c., &c.*

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